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PHYSICAL OCEANOGRAPHIC, BIOLOGICAL, AND CHEMICAL DATA-- SOUTH ATLANTIC COAST OF THE UNITED STATES

Gill Cruise 5

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FISH AND WILDLIFE SERVICE

EXPLANATORY NOTE

The series embodies results of investigations, usually of restricted scope, intended to aid or direct management or utilization practices and as guides for administrative or legislative action. It is issued in limited quantities for official use of Federal, State or cooperating agencies and in processed form for economy and to avoid delay in publication.

United States Department of the Interior, Fred A. Seaton, Secretary
Fish and Wildlife Service, Arnie J. Suomela, Commissioner

PHYSICAL OCEANOGRAPHIC, BIOLOGICAL, AND CHEMICAL DATA SOUTH ATLANTIC COAST OF THE UNITED STATES M/V THEODORE N. GILL CRUISE 5

by

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Physical Oceanographic, Biological, and Chemical Data
South Atlantic Coast of the United States
M/V Theodore N. Gill Cruise 5

This is the fifth in a series of reports presenting basic data from cruises of the Theodore N. Gill in waters off the South Atlantic coast of the United States.

Background of the investigations; objectives; procedures on station; and chemical, biological and oceanographic methods and procedures were presented in the report for Cruise 1 (Anderson, Gehringer, and Cohen, 1956). Biological methods and procedures were the same as those used on Cruises 3 and 4 (Anderson and Gehringer, 1957a and 1957b). The basic station plan is shown in figure 1.

NARRATIVE ACCOUNT OF CRUISE 5

The Gill sailed from Brunswick, Georgia on January 20, 1954, to begin the southern leg of the cruise. Special stations 5, 6, and 7 were occupied on January 21 and 22, but heavy seas prevented the taking of special station 8. The standard station was occupied for a period of about 42 hours from January 23 to 25, during which time 14 hydrographic casts were completed. Routine meteorological observations, bathythermograph observations, and special plankton tows for deep scattering layer and other studies were also taken.

The vessel proceeded to Nassau, B. W. I., and special equipment was installed by Columbia University personnel. On January 27-28 a special ambient station was conducted east of Eleuthera Island. Very strong winds caused the work to be terminated and the special equipment was unloaded at Nassau on January 29.

Occupation of the regular stations began on January 30. Workable weather conditions were encountered most of the remainder of the southern leg, and all but 5 of the regular stations were worked. The vessel returned to Brunswick on February 6 for supplies.

The northern leg of the cruise commenced on February 9 and adverse weather conditions plagued most of this part of the cruise--only a day or day and a half of workable weather being available at a stretch. In spite of this handicap the coverage was as complete as could be expected during winter--9 regular and 4 special stations were omitted. The vessel occupied the last station on February 23 and arrived back in Brunswick on February 25 to terminate the cruise. The cruise track is shown in figure 2.

Approximately 3,000 miles were traveled in accomplishing this cruise, 83 oceanographic stations were occupied (including regular, special and standard), and a total of 97 bathythermograph casts and 83 Nansen casts (fig. 3) were made. Bottom samples were obtained on many stations (fig. 4), and Secchi disk readings were taken during daylight hours when conditions permitted. Oxygen determinations were made aboard vessel for all stations and all levels. Water samples were collected from all stations and levels for shore analysis on salinity, total phosphorus, inorganic phosphate, carbohydrates, proteins, and nitrate. An oblique plankton tow was made with the Gulf III all-metal plankton sampler on all but a few of the stations--a standard half-meter silk net was utilized on a few stations where heavy seas made use of the all-metal sampler impractical. In addition, 44 runs with the Gulf IA high-speed sampler between stations, and 31 runs with the continuous plankton sampler were obtained. Dip-net fishing was carried out both during the day and at night under lights whenever possible. Collections of material by dip net were not as fruitful as on some previous cruises--this because of rough sea conditions as well as an apparent scarcity of young fish at the surface over much of the area.

Scientific personnel participating in the cruise were:

I. Southern Leg

U. S. Fish and Wildlife Service and Cooperators:

W. W. Anderson — Chief Scientist

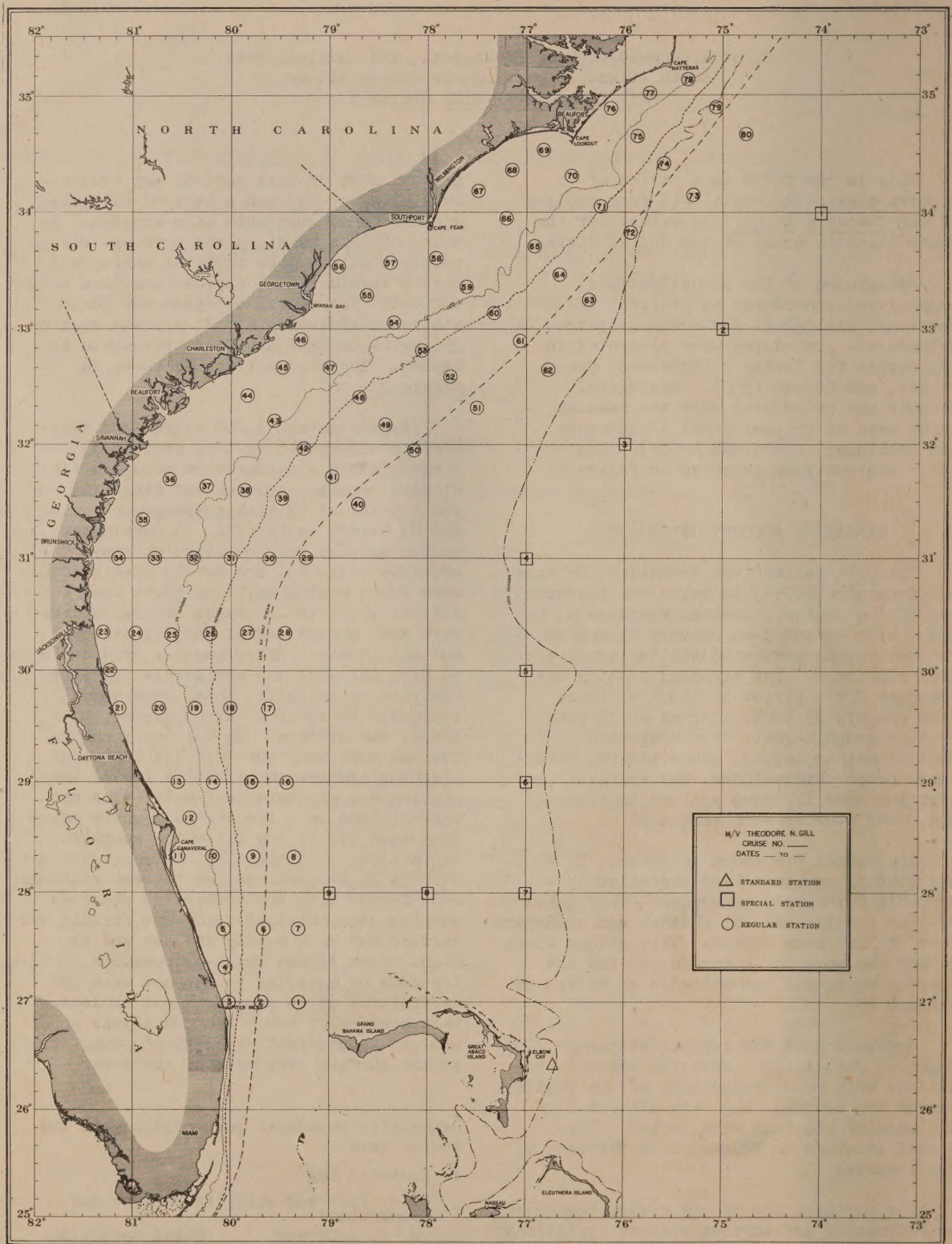

Figure 1.--Basic station plan.

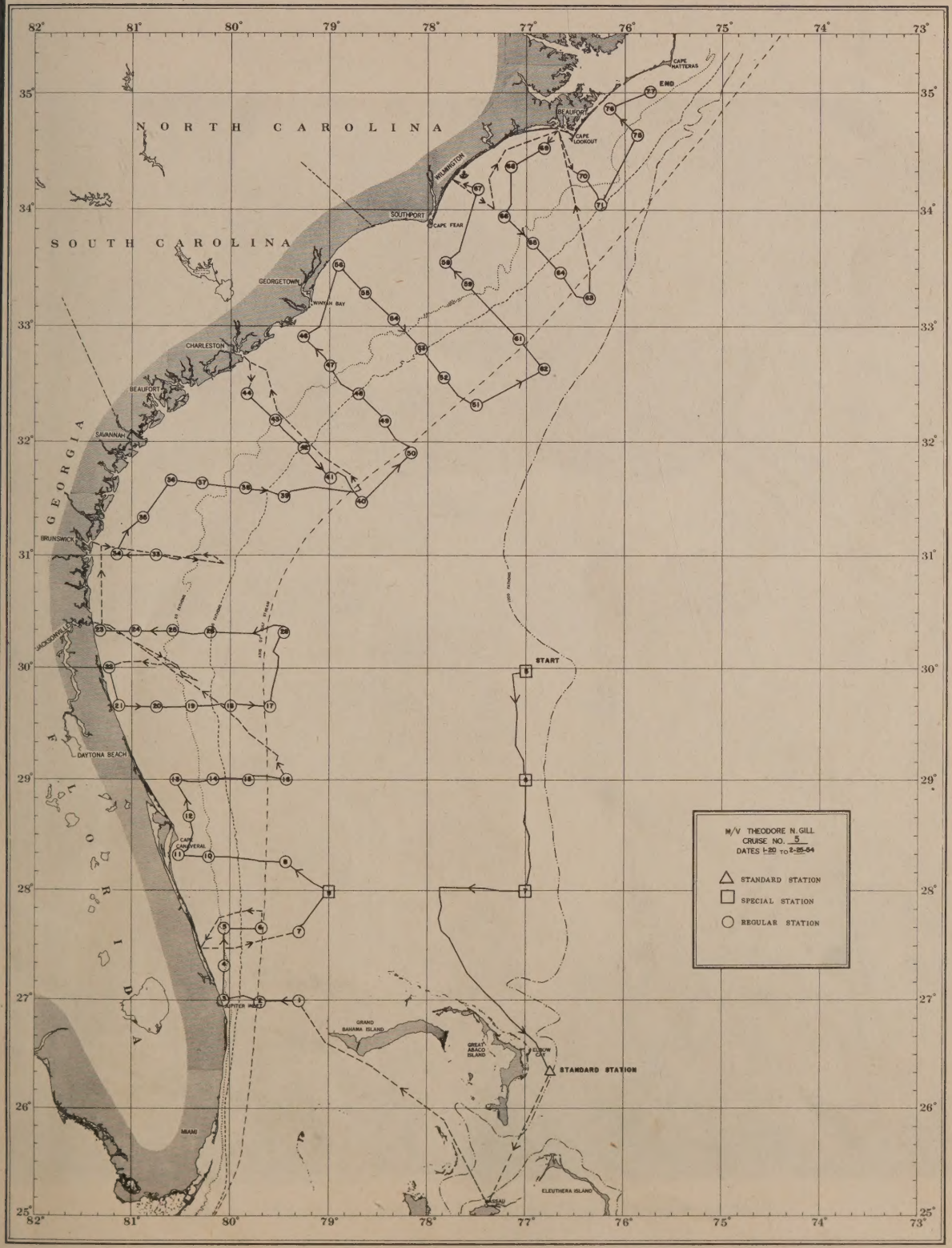

Figure 2.--Track chart.

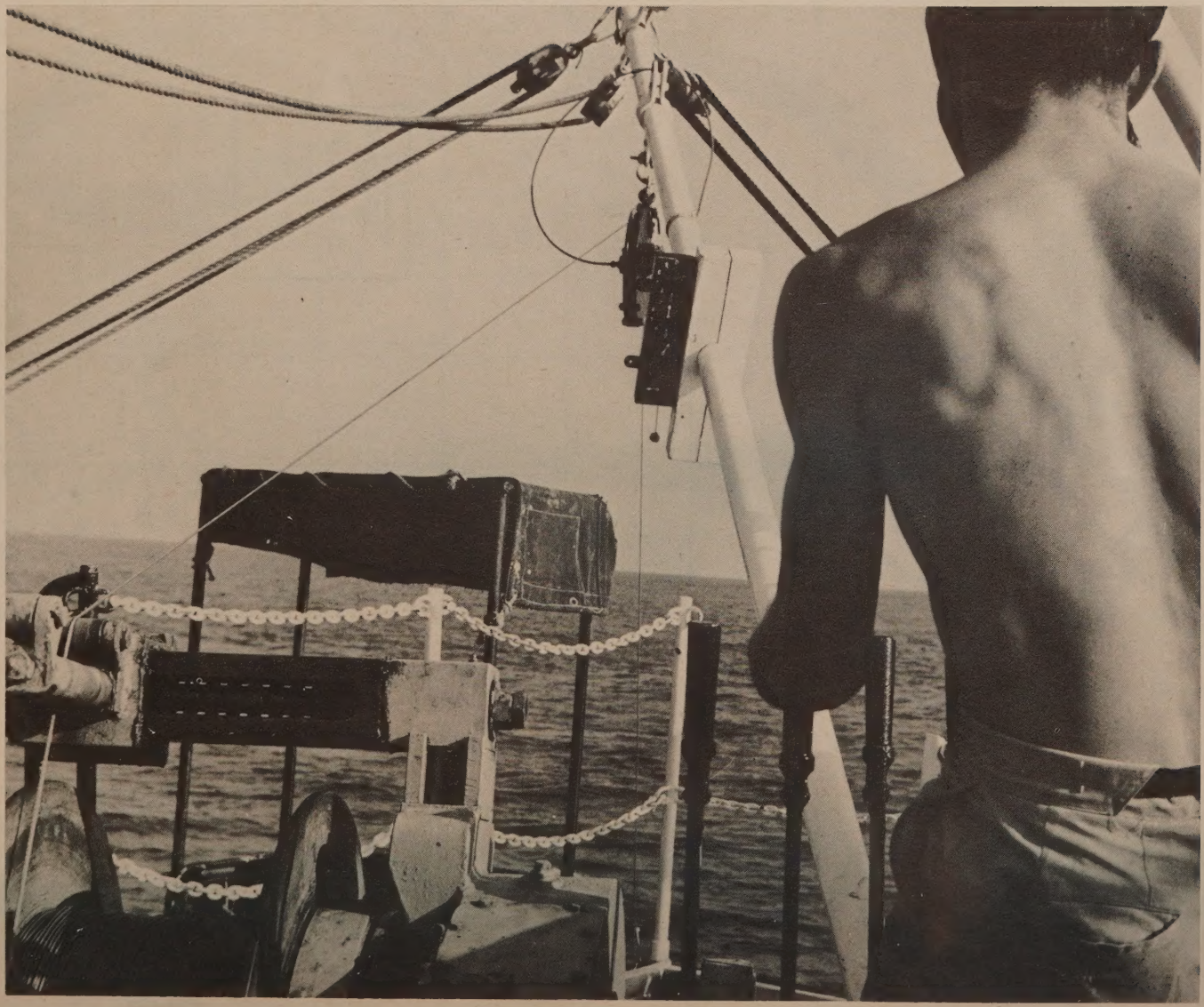

Figure 3.--Arrangement of equipment for hydrographic casts.

Figure 4.--Landing modified orange-peel bottom sampler

Frank T. Knapp	Biologist (Georgia Game and Fish Comm.)
Clyde C. Bryant	Chemical Aid
Dennis C. Anderson	Aid

Navy Hydrographic Office:

Melvin Light	Senior Oceanographer
Richard Williams	Oceanographer
Douglas Kolb	Oceanographer

Office of Naval Research:

Thomas E. Bowman	Marine Biologist (Narragansett Marine Laboratory)

II. Northern Leg

U. S. Fish and Wildlife Service and Cooperators:

W. W. Anderson	Chief Scientist
Frank T. Knapp	Biologist (Georgia Game and Fish Comm.)
Edward Cohen	Chemist
Clyde C. Bryant	Chemical Aid
Dennis C. Anderson	Aid

Navy Hydrographic Office:

Melvin Light	Senior Oceanographer
Richard Williams	Oceanographer
Douglas Kolb	Oceanographer

EXPLANATION OF DATA SHEETS AND TABLES

Oceanographic and Chemical

Each of the items appearing on the station data pages is explained below. All doubtful data are indicated and were not used in the construction of the curves from which the interpolated values (standard depth values) were derived. Observed values which were obviously false were omitted entirely. A dash in a table means that no value was available. Interpolations for standard depth values for temperature, salinity, sigma-t, and oxygen are IBM calculations; those for the chemical constituents were derived from straight lines between observed values.

The profiles of salinity, temperature, and density,were prepared from these data, and appear as figures 5-18.

1. Cruise Number. The first cruise over the established station pattern (fig. 1) was numbered Gill 1, and subsequent cruises, Gill 2 through Gill 9 (only Gill 5 is covered by the present report.

2. Station Number. Stations are numbered consecutively, starting with one, at the beginning of each cruise. The station pattern and numbers as shown in figure 1 were maintained on each cruise. If a station or series of stations was not occupied, these station numbers are omitted. Regular stations have numbers only; standard and special stations are specifically indicated.

3. Date. Month, day, and year are given.

4. Latitude and Longitude. The position of the station is given in degrees and minutes.

5. Time. Given in Greenwich Mean Time and is that hour nearest to the start of the first cast.

6. Depth. Is the observed uncorrected sonic sounding for the station recorded in meters.

7. Wind. Wind speed is given in meters per second. Direction from which the wind blows is coded in degrees true to the nearest ten degrees. The last zero is omitted. North is 36 on this scale and calm is 00. See table 1, "Compass Direction Conversion Table for Wind, Sea, and Swell Directions."

8. Barometer. The barometric pressure is coded in millibars, neglecting the 900 or 1000. Thus 996 millibars is coded as 96 and 1008 millibars is coded as 08.

9. Air Temperature. Dry bulb and wet bulb temperatures are entered to the nearest tenth of a degree (centigrade).

10. Humidity. The percent of humidity is coded directly.

11. Weather. Weather is coded as indicated in table 2, "Numerical Weather Codes-Present Weather."

12. Clouds. Cloud type and amount are coded as indicated in table 3, "Cloud Type"; and table 4, "Cloud Amount."

13. Sea. Sea direction and amount are coded as indicated in table 5, "Sea Amount"; and table 1.

14. Swell. Swell directions and amount are coded as indicated in table 6, "Swell Amount"; and table 1.

15. Visibility. Visibility is coded as indicated in table 7, "Visibility."

16. Water Transparency. Given as meters to which a Secchi disc is visible.

Subsurface Observations

1. Sample Depth. Observed (actual) depth of each samples is given in meters. Interpolated values at standard depths are also given. The standard depths in meters are: 0, 10, 20, 30, 50, 75, 100, 150, 200, 250, 300, 400, 500, 600, 700, 800, 1000, 1200, 1500, 2000, 2500, 3000, and thence every 1000 meters.

2. Temperature. The centigrade temperature is given in degrees and hundredths.

3. Salinity. Salinity is given in parts per thousand to two decimal places.

4. Sigma-t. To convert to density divide by 1000 and add 1. Thus, a sigma-t value of 22.35 converts to a density of 1.02235.

5. Dissolved Oxygen. These values are given in milliliters per liter to two decimal places.

6. Total Phosphorus. Values are given in microgram atoms per liter to the nearest 0.1 of a unit.

7. Inorganic Phosphate. Values are given in microgram atoms per liter to the nearest 0.1 of a unit.

8. Nitrate-nitrite. These values are given in microgram atoms per liter to the nearest 0.5 of a unit.

9. Carbohydrates (Arabinose). These values are given in terms of milligrams per liter to the nearest 0.1 of a unit. Collier et al. (1953) presented a technique for estimating certain elements of the organic materials in sea water which react to the test for carbohydrates. The carbohydrate values are given as arabinose equivalents, and are not necessarily the actual concentrations of carbohydrate substances.

10. Proteins (Tyrosine). These values are given to the nearest 0.1 of a unit as milligrams per liter of protein material in sea water, which reacts to the test for tyrosine.

Biological

1. Plankton volumes (Gulf III and silk half-meter nets), table 8. The position given is that at beginning of the tow. The depth of the haul is given from 0 to the greatest depth reached. The volumes as given are "wet volumes" (procedures for determination were given under methods in report for cruise 1). Very few samples contained large organisms such as jellyfish (which were removed), so that the volumes represent smaller organisms.

2. Planton volumes (Gulf IA high-speed sampler), table 9. The position given is that at the center of the tow. All tows were made at the surface. The volumes as given are "wet volumes" (procedures for determination were given under methods in report for cruise 1). Very few samples contained large organisms such as jellyfish (which were removed), so that the volumes represent smaller organisms.

3. Numbers of plankton organisms per cubic meter of water (half-meter net), table 10. The procedures for plankton tows, methods for sorting and counting, and calculations of numbers of organisms were described under methods in report for cruise 1. Counts are given for major groups as indicated.

4. Numbers of plankton organisms per cubic meter of water (high-speed sampler), table 11. The procedures for plankton tows, methods for sorting and counting, and calculations of numbers of organisms were described under methods for cruise 3. Counts are given for major groups as indicated.

5. Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), table 12. Description of this sampler, its use, and methods of calculating numbers of organisms were given under methods in report for cruise 1. Counts are given by compartment for major groups as indicated.

6. List of the species of fish in dip-net, trolling, and stomach contents collections (D-dip net; T-trolling; S-stomach contents), table 13. The species are listed in alphabetical order, followed by symbols indicating method of capture.

7. Numbers and species of fish taken by trolling, table 14. The stage of gonad development is based on International Council classifications of gonad maturity for the herring (International Councils Rapports et Proces-Verbaux des Reunions, Vol. LXXIV, pp. 117, March 1931). The scale is only a guide to general classifications and must be treated as such.

This scale follows:

Stage I. Virgin individuals. Very small sexual organs close under vertebral column. Wine-coloured torpedo-shaped ovaries about 2-3 cm. long and 2-3 mm. thick. Eggs invisible to naked eye. Whitish or grayish brown knife-shaped testes 2-3 cm. long and 2-3 mm. broad.

Stage II. Maturing virgins or recovering spents. Ovaries somewhat longer than half the length of ventral cavity, about 1 cm. diameter. Eggs small but visible to naked eye. Milt whitish, somewhat blood-shot, same size as ovaries, but still thin and knife-shaped.

Stage III. Sexual organs more swollen, occupying about half of ventral cavity.

Stage IV. Ovaries and testes nearly filling 2/3 of ventral cavity. Eggs not transparent, milt whitish, swollen.

Stage V. Sexual organs filling ventral cavity. Ovaries with some large transparent eggs. Milt white, not yet running.

Stage VI. Roe and milt running (spawning).

Stage VII. Spents. Ovaries slack with residual eggs. Testes baggy, bloodshot. Doubtful cases are indicated by quoting two stages e.g. "St. I-II, St. VII-II," etc.

8. Numbers and species of fish taken by dip net, table 15. There is shown, by family, the genera and species taken. Numbers of specimens from each station are given in parentheses, followed by the approximate size of size range of standard length, in millimeters.

ACKNOWLEDGMENTS

Acknowledgment is made to the following agencies and individuals for contributions in securing and processing the material presented. To the Navy Hydrographic Office for their cooperation in planning and executing the field program and for processing the physical oceanographic data. To the Office of Naval Research, and Dr. Sidney R. Galler in particular, for help in planning and executing the field program. To the Georgia Game and Fish Commission for their cooperation in the biological and chemical studies; through Frank T. Knapp, biologist, and Joseph E. Moore, chemist (now a member of Fish and Wildlife Service staff). To the Florida State Board of Conservation (through the Marine Laboratory of the University of Miami) for their cooperation in the biological studies, through George F. Arata, Jr., biologist. To Dean F. Bumpus of the Woods Hole Oceanographic Institution for preparation of the salinity, temperature, and density profiles which appear as figures 5-18.

From our own staff special recognition

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Table 1.--Compass direction conversion table for wind, sea, and swell directions

Code	Direction
00	Calm
01	5° to 14°
02	15° to 24° NNE
03	25° to 34°
04	35° to 44°
05	45° to 54° NE
06	55° to 64°
07	65° to 74° ENE
08	75° to 84°
09	85° to 94° E
10	95° to 104°
11	105° to 114° ESE
12	115° to 124°
13	125° to 134°
14	135° to 144° SE
15	145° to 154°
16	155° to 164° SSE
17	165° to 174°
18	175° to 184° S
19	185° to 194°
20	195° to 204° SSW
21	205° to 214°
22	215° to 224°
23	225° to 234° SW
24	235° to 244°
25	245° to 254° WSW
26	255° to 264°
27	265° to 274° W
28	275° to 284°
29	285° to 294° WNW
30	295° to 304°
31	305° to 314°
32	315° to 324° NW
33	325° to 334°
34	335° to 344° NNW
35	345° to 354°
36	355° to 4° N

TABLE II NUMERICAL WEATHER CODES—PRESENT WEATHER

00 Cloud development NOT observed or NOT observable during past hour.	**01** Clouds generally dissolving or becoming less developed during past hour.	**02** State of sky on the whole unchanged during past hour.	**03** Clouds generally forming or developing during past hour.	**04** Visibility reduced by smoke.	**05** Haze.	**06** Widespread dust in suspension in the air, NOT raised by wind, at time of observation.	**07** Dust or sand raised by wind, at time of observation.	**08** Well developed dust devil(s) within past hour.	**09** Duststorm or sandstorm within sight of or at station during past hour.
10 Light fog.	**11** Patches of shallow fog at station, NOT deeper than 6 feet on land.	**12** More or less continuous shallow fog at station, NOT deeper than 6 feet on land.	**13** Lightning visible, no thunder heard.	**14** Precipitation within sight, but NOT reaching the ground.	**15** Precipitation within sight, reaching the ground, but distant from station.	**16** Precipitation within sight, reaching the ground, near to but NOT at station.	**17** Thunder heard, but no precipitation at the station.	**18** Squall(s) within sight during past hour.	**19** Funnel cloud(s) within sight during past hour.
20 Drizzle (NOT freezing and NOT falling as showers) during past hour, but NOT at time of ob.	**21** Rain (NOT freezing and NOT falling as showers) during past hour, but NOT at time of ob.	**22** Snow (NOT falling as showers) during past hour, but NOT at time of observation.	**23** Rain and snow (NOT falling as showers) during past hour, but NOT at time of observation.	**24** Freezing drizzle or freezing rain (NOT falling as showers) during past hour, but NOT at time of observation.	**25** Showers of rain during past hour, but NOT at time of observation.	**26** Showers of snow, or of rain and snow, during past hour, but NOT at time of observation.	**27** Showers of hail, or of hail and rain, during past hour, but NOT at time of observation.	**28** Fog during past hour, but NOT at time of observation.	**29** Thunderstorm (with or without precipitation) during past hour, but NOT at time of observation.
30 Slight or moderate duststorm or sandstorm has decreased during past hour.	**31** Slight or moderate duststorm or sandstorm no appreciable change during past hour.	**32** Slight or moderate duststorm or sandstorm has increased during past hour.	**33** Severe duststorm or sandstorm, has decreased during past hour.	**34** Severe duststorm or sandstorm, no appreciable change during past hour.	**35** Severe duststorm or sandstorm, has increased during past hour.	**36** Slight or moderate drifting snow, generally low.	**37** Heavy drifting snow, generally low.	**38** Slight or moderate drifting snow, generally high.	**39** Heavy drifting snow, generally high.
40 Fog at distance at time of observation, but NOT at station during past hour.	**41** Fog in patches.	**42** Fog, sky discernible, has become thinner during past hour.	**43** Fog, sky NOT discernible, has become thinner during past hour.	**44** Fog, sky discernible, no appreciable change during past hour.	**45** Fog, sky NOT discernible no appreciable change during past hour.	**46** Fog, sky discernible, has begun or become thicker during past hour.	**47** Fog, sky NOT discernible, has begun or become thicker during past hour.	**48** Fog, depositing rime, sky discernible.	**49** Fog, depositing rime, sky not discernible.
50 Intermittent drizzle (NOT freezing), slight at time of observation.	**51** Continuous drizzle (NOT freezing) slight at time of observation.	**52** Intermittent drizzle (NOT freezing) moderate at time of ob.	**53** Continuous drizzle (NOT freezing), moderate at time of ob.	**54** Intermittent drizzle (NOT freezing), thick at time of observation.	**55** Continuous drizzle (NOT freezing), thick at time of observation.	**56** Slight freezing drizzle.	**57** Moderate or thick freezing drizzle.	**58** Drizzle and rain, slight.	**59** Drizzle and rain, moderate or heavy.
60 Intermittent rain (NOT freezing), slight at time of observation.	**61** Continuous rain (NOT freezing), slight at time of observation.	**62** Intermittent rain (NOT freezing), moderate at time of ob.	**63** Continuous rain (NOT freezing), moderate at time of observation.	**64** Intermittent rain (NOT freezing), heavy at time of observation.	**65** Continuous rain (NOT freezing), heavy at time of observation.	**66** Slight freezing rain.	**67** Moderate or heavy freezing rain.	**68** Rain or drizzle and snow, slight.	**69** Rain or drizzle and snow, moderate or heavy.
70 Intermittent fall of snowflakes, slight at time of observation.	**71** Continuous fall of snowflakes, slight at time of observation.	**72** Intermittent fall of snowflakes, moderate at time of observation.	**73** Continuous fall of snowflakes, moderate at time of observation.	**74** Intermittent fall of snowflakes, heavy at time of observation.	**75** Continuous fall of snowflakes, heavy at time of observation.	**76** Ice needles (with or without fog).	**77** Granular snow (with or without fog).	**78** Isolated starlike snow crystals (with or without fog).	**79** Ice pellets (sleet, U. S. definition).
80 Slight rain shower(s).	**81** Moderate or heavy rain shower(s).	**82** Violent rain shower(s).	**83** Slight shower(s) of rain and snow mixed.	**84** Moderate or heavy shower(s) of rain and snow mixed.	**85** Slight snow shower(s).	**86** Moderate or heavy snow shower(s).	**87** Slight shower(s) of soft or small hail with or without rain or rain and snow mixed.	**88** Moderate or heavy shower(s) of soft or small hail with or without rain or rain and snow mixed.	**89** Slight shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder.
90 Moderate or heavy shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder.	**91** Slight rain at time of ob.; thunderstorm during past hour, but NOT at time of observation.	**92** Moderate or heavy rain at time of ob.; thunderstorm during past hour, but NOT at time of observation.	**93** Slight snow or rain and snow mixed or hail at time of observation.; thunderstorm during past hour, but not at time of observations.	**94** Mod. or heavy snow, or rain and snow mixed or hail at time of ob.; thunderstorm during past hour, but NOT at time of observation.	**95** Slight or mod. thunderstorm without hail, but with rain and/or snow at time of observation.	**96** Slight or moderate thunderstorm, with hail at time of observation.	**97** Heavy thunderstorm, without hail, but with rain and/or snow at time of observation.	**98** Thunderstorm combined with duststorm or sandstorm at time of observation.	**99** Heavy thunderstorm with hail at time of observation.

Table 3.--Cloud type

Code	
0	Stratus or Fractostratus
1	Cirrus
2	Cirrostratus
3	Cirrocumulus
4	Altocumulus
5	Altostratus
6	Stratuscumulus
7	Nimbostratus
8	Cumulus or Fractocumulus
9	Cumulonumbus

Table 4.--Cloud amount

Code	
0	No clouds
1	Less than 1/10 or 1/10
2	2/10 and 3/10
3	4/10
4	5/10
5	6/10
6	7/10 and 8/10
7	9/10 and 9/10 plus
8	10/10
9	Sky obscured

Table 5.--Sea amount

Code	Approximate Height (feet)	Description
0	------	Calm
1	Less than 1	Smooth
2	1 to 3	Slight
3	3 to 5	Moderate
4	5 to 8	Rough
5	8 to 12	Very rough
6	12 to 20	High
7	20 to 40	Very high
8	40 and over	Mountainous
9	------	Very rough confused sea

Table 6.--Swell amount

Code	Approximate Height (feet)	Description		Approximate Length (feet)
0	----	No swell		----
1	1 to 6	Low swell	Short or Average	0 to 600
2			Long	Above 600
3	6 to 12	Moderate	Short	0 to 300
4			Average	300 to 600
5			Long	Above 600
6	Greater than 12	High	Short	0 to 300
7			Average	300 to 600
8			Long	Above 600
9	----	Confused		----

Table 7. Visibility

Code

0	Dense fog	50 yards
1	Thick fog	200 yards
2	Fog	400 yards
3	Moderate fog	1000 yards
4	Thin fog or mist	1 mile
5	Visibility poor	2 miles
6	Visibility moderate	5 miles
7	Visibility good	10 miles
8	Visibility very good	30 miles
9	Visibility excellent	Over 30 miles

Table 8.--Plankton volumes (Gulf III and silk half-meter nets)

Sta.	Position N. Lat.	Position W. Long.	(1954) Date	Time (EST) Start	Time (EST) End	Vol. water strained (m^3)	Depth of haul in meters	Vol. per m^3 strained (ml)
1	27°00'	79°18'	Jan. 30	1011	1046	338.5	0-60	0.044
2	27°00'	79°42'	Jan. 30	1353	1428	154.1	0-56	0.065
3	27°00'	80°04'	Jan. 30	1639	1700	223.2	Surface	0.022
4	27°20'	80°04'	Jan. 30	1910	1931	229.9	0-8	0.065
5	27°40'	80°04'	Jan. 30	2144	2206	203.5	0-13	0.123
6	27°40'	79°41'	Jan. 31	0300	0330	139.2	0-60	0.180
8	28°16'	79°26'	Feb. 1	0720	0746	228.0	0-56	0.088
10	28°19'	80°12'	Feb. 1	1240	1303	226.0	0-18	0.111
11	28°20'	80°32'	Feb. 1	1500	1522	172.5	Surface	0.087
12	28°41'	80°25'	Feb. 1	0625	0646	185.0	0-7	0.243
13	29°00'	80°32'	Feb. 1	2126	2148	183.6	0-8	0.109
14	29°00'	80°10'	Feb. 2	0001	0026	157.5	0-20	0.222
15	29°00'	79°48'	Feb. 2	0347	0419	242.6	0-65	0.124
16	29°00'	79°26'	Feb. 2	1303	1334	247.2	0-60	0.081
22	30°00'	81°14'	Feb. 4	0718	0739	296.4	Surface	0.101
21	29°40'	81°08'	Feb. 4	1003	1026	180.0	0-4	0.167
20	29°40'	80°45'	Feb. 4	1228	1250	177.1	0-6	0.350
19	29°40'	80°23'	Feb. 4	1451	1513	230.2	0-10	0.282
18	29°40'	80°00'	Feb. 4	1805	1838	364.5	0-60	0.082
17	29°40'	79°36'	Feb. 4	2156	2232	315.2	0-69	0.063
28*	30°19'	79°27'	Feb. 5	0440	0500	**	Surface	-
26*	30°20'	80°12'	Feb. 5	1142	1204	**	Surface	-
25	30°20'	80°34'	Feb. 5	1445	1503	176.2	0-9	0.227
24	30°20'	80°59'	Feb. 5	1722	1743	213.6	0-6	0.094
23	30°20'	81°20'	Feb. 5	1934	1956	141.4	0-4	0.248
33	31°00'	80°46'	Feb. 10	0728	0750	187.8	0-11	0.293
34	31°00'	81°09'	Feb. 10	1036	1057	135.4	Surface	0.295
35	31°20'	80°54'	Feb. 10	1344	1405	195.6	Surface	0.128
36	31°40'	80°37'	Feb. 10	1641	1702	217.7	Surface	0.041
37	31°38'	80°18'	Feb. 10	1858	1920	223.9	0-7	0.192
38	31°36'	79°51'	Feb. 10	2137	2159	238.3	0-12	0.138
44	32°26'	79°50'	Feb. 14	1100	1121	201.7	Surface	0.025
43	32°12'	79°33'	Feb. 14	1352	1411	146.3	0-16	1.094
42	31°57'	79°16'	Feb. 14	1715	1737	251.5	0-65	0.238
41	31°42'	79°00'	Feb. 14	2204	2249	279.8	0-86	0.125
40	31°28'	78°40'	Feb. 15	0226	0309	385.5	0-69	0.078
50	31°54	78°10'	Feb. 15	0658	0724	174.3	0-65	0.229
49	32°11'	78°27'	Feb. 15	1127	1202	296.9	0-65	0.168
48	32°26'	78°42'	Feb. 15	1441	1512	130.8	0-65	0.688
47	32°40'	79°00'	Feb. 15	1726	1747	150.6	0-8	0.797

* No. 1 silk half-meter net
** No water volume determined

Table 8.--Plankton volumes (Gulf III and silk half-meter nets), cont'd

Sta.	Position N. Lat.	Position W. Long.	(1954) Date	Time (EST) Start	Time (EST) End	Vol. water strained (m^3)	Depth of haul in meters	Vol. per m^3 strained (ml)
46	32°55'	79°16'	Feb. 15	2001	2022	164.0	Surface	0.488
56	33°32'	78°55'	Feb. 16	0106	0127	218.2	Surface	0.137
55	33°18'	78°38'	Feb. 16	0338	0400	170.6	0-6	0.264
54	33°03'	78°21'	Feb. 16	0631	0657	183.8	0-10	0.571
53	32°48'	78°04'	Feb. 16	0942	1018	249.9	0-77	0.420
52	32°33'	77°50'	Feb. 16	1315	1348	262.9	0-90	0.323
51	32°20'	77°30'	Feb. 16	1708	1743	366.7	0-65	0.123
62*	32°38'	76°49'	Feb. 16	2235	2255	**	Surface	-
61*	32°54'	77°03'	Feb. 17	0141	0202	**	Surface	-
59*	33°22'	77°36'	Feb. 17	0652	0715	**	Surface	-
58*	33°33'	77°49'	Feb. 17	1054	1115	**	Surface	-
67	34°11'	77°29'	Feb. 17	1446	1508	202.6	0-5	0.025
69	34°32	76°49'	Feb. 20	0946	1007	241.4	Surface	0.021
68	34°22'	77°09'	Feb. 20	1205	1226	176.4	0-11	0.085
66	33°57'	77°13'	Feb. 20	1548	1610	110.6	0-18	0.768
65	33°43'	76°56'	Feb. 20	1913	1935	105.1	0-18	0.190
64	33°28'	76°39'	Feb. 20	2248	2325	153.4	0-144	0.098
63*	33°15'	76°22'	Feb. 21	0430	0451	**	Surface	-
70	34°18'	76°26'	Feb. 22	1145	1206	138.7	0-9	0.324
71	34°03'	76°15'	Feb. 22	1426	1458	241.4	0-65	0.186
75	34°39'	75°53'	Feb. 22	1943	2010	198.6	0-16	0.151
76	34°53'	76°09'	Feb. 22	2206	2227	200.6	Surface	0.249
77	35°01'	75°44'	Feb. 23	0042	0103	158.4	0-8	0.284
Spc.5	29°58'	77°00'	Jan. 21	2112	2136	261.1	0-52	0.191
Spc.6	29°00'	77°00'	Jan. 22	0552	0624	391.9	0-73	0.038
Spc.7	28°00'	77°00'	Jan. 22	1614	1654	374.8	0-65	0.027
Spc.9	28°00'	79°00'	Feb. 1	0252	0323	355.9	0-69	0.042

* No. 1 silk half-meter net
** No water volume determined

Table 9.--Plankton volumes (Gulf IA High-speed sampler)

Tow No.	Position of ship at center of tow: N. Lat.	W. Long.	(1954) Date	Time (EST) Start	End	Vol. water strained (m^3)	Vol. per m^3 strained (ml)
1	27°00'	79°28'	Jan. 30	1051	1215	16.9	0.059
2	27°02'	79°52'	Jan. 30	1432	1545	13.7	0.146
3	27°10'	80°04'	Jan. 30	1703	1816	14.4	0.069
4	27°28'	80°04'	Jan. 30	1934	2040	13.2	0.152
5	27°40'	79°55'	Jan. 30	2210	2330	16.0	0.125
6	28°19'	80°21'	Feb. 1	1306	1418	3.8	0.526
7	28°27'	80°23'	Feb. 1	1525	1730	21.9	0.046
8	28°49'	80°26'	Feb. 1	1850	2040	20.5	0.439
9	28°59'	80°20'	Feb. 1	2150	2315	15.4	0.065
10	29°01'	79°59'	Feb. 2	0030	0202	18.1	0.276
11	29°02'	79°35'	Feb. 2	0424	0550	15.7	0.127
12	29°50'	81°10'	Feb. 4	0745	0915	18.4	0.054
13	29°39'	80°55'	Feb. 4	1030	1155	15.7	0.127
14	29°40'	80°34'	Feb. 4	1250	1355	12.2	0.656
15	29°39'	80°11'	Feb. 4	1517	1650	15.6	0.128
16	29°41'	79°48'	Feb. 4	1840	2010	18.6	0.054
17	30°20'	80°45'	Feb. 5	1503	1625	15.2	0.724
18	30°20'	81°07'	Feb. 5	1745	1900	14.7	0.136
19	31°01'	80°56'	Feb. 10	0755	0935	17.0	0.059
20	31°12'	81°03'	Feb. 10	1100	1250	19.2	0.104
21	31°29'	80°45'	Feb. 10	1408	1550	19.2	0.156
22	31°39'	80°25'	Feb. 10	1705	1825	14.5	0.138
23	31°37'	80°03'	Feb. 10	1925	2050	14.6	0.479
24	32°28'	79°42'	Feb. 14	1124	1235	14.2	0.070
25	32°06'	79°27'	Feb. 14	1417	1558	17.6	0.795
26	31°49'	79°06'	Feb. 14	1740	1945	21.7	0.230
27	31°37'	78°48'	Feb. 14-15	2255	0042	18.4	0.217
28	31°44'	78°24'	Feb. 15	0315	0519	23.5	0.085
29	32°00'	78°16'	Feb. 15	0727	0945	25.6	0.156
30	32°31'	78°53'	Feb. 15	1515	1653	16.4	0.732
31	32°48'	79°06'	Feb. 15	1751	1912	14.6	2.123
32	33°10'	79°01'	Feb. 15-16	2025	0025	26.1	0.306
33	33°26'	78°48'	Feb. 16	0130	0245	14.7	0.204
34	33°11'	78°29'	Feb. 16	0403	0550	19.1	0.209
35	32°57'	78°13'	Feb. 16	0700	0832	15.8	0.316
36	32°43'	77°57'	Feb. 16	1020	1200	17.6	0.284
37	32°25'	77°41'	Feb. 16	1350	1555	18.3	0.164
38	32°31'	77°08'	Feb. 16	1747	2110	31.4	0.223
39	34°28'	76°57'	Feb. 20	1010	1115	13.7	0.073
40	34°11'	77°08'	Feb. 20	1230	1500	26.9	0.260
41	34°13'	76°21'	Feb. 22	1206	1332	15.7	0.127
42	34°47'	76°01'	Feb. 22	2013	2110	10.8	0.092
43	34°58'	76°04'	Feb. 22	2230	2350	15.5	0.258

Table 10.--Numbers of plankton organisms per cubic meter of water (half-meter net)

Station Number	Reg. 1	Reg. 2	Reg. 3	Reg. 4	Reg. 5	Reg. 6	Reg. 8	Reg. 10
Protozoa	43.8	39.9	65.5	84.8	107.3	45.7	23.2	198.9
Coelenterata	5.0	4.0	5.5	10.9	11.2	24.6	7.9	5.7
Chaetognatha	6.7	5.6	8.2	7.0	6.3	2.7	5.5	11.8
Misc. Worms	0.8	0.5	0.4	0.7	0.8	0.4	0.6	0.5
Copepoda	100.2	92.2	49.4	59.0	101.0	123.4	95.8	173.5
Ostracoda	3.1	2.5	0.9	51.6	3.6	5.3	1.0	21.6
Mysidacea	-	0.1	-	0.1	0.6	-	-	0.2
Amphipoda	1.3	0.5	0.4	4.2	0.8	1.3	0.9	1.3
Isopoda	-	0.1	-	0.1	-	-	-	-
Stomatopoda	-	-	-	0.1	-	-	-	0.1
Euphausiacea	3.2	7.4	6.0	9.0	7.6	5.9	2.7	4.9
Shrimp	0.4	0.5	1.0	2.1	1.4	1.0	0.3	13.7
Crabs	0.1	0.4	1.1	6.0	0.8	5.4	0.1	48.8
Misc. Crustaceans	-	-	0.1	0.1	-	-	-	0.2
Pteropoda	0.5	0.2	0.3	1.0	1.0	1.7	0.4	0.4
Misc. Mollusca	0.6	1.3	1.3	2.5	1.3	3.6	1.7	0.6
Larvacea	47.0	79.8	8.8	38.7	94.8	129.4	93.9	113.5
Misc. Tunicata	< 0.1	-	-	0.3	0.1	0.1	0.1	0.3
Leptocardia	< 0.01	-	-	-	0.01	0.02	0.01	-
Misc. Organisms	3.0	2.6	1.8	30.4	5.3	6.0	2.8	21.6
Subtotal	215.8	237.6	150.7	308.6	343.9	356.5	236.9	617.6
Fish Eggs	0.08	0.01	2.69	13.66	1.86	0.05	0.05	2.05
Fish Larvae	0.43	0.40	0.43	1.03	0.34	0.22	0.42	1.23
Total	216.3	238.0	153.8	323.3	346.1	356.8	237.4	620.9

Table 10.--Numbers of plankton organisms per cubic meter of water (half-meter net), cont'd

Station Number	Reg. 11	Reg. 12	Reg. 13	Reg. 14	Reg. 15	Reg. 16	Reg. 17	Reg. 18
Protozoa	12.2	700.2	256.3	115.8	61.2	57.4	27.6	36.1
Coelenterata	-	1.4	2.9	14.6	8.0	5.6	5.2	3.0
Chaetognatha	1.0	49.7	38.7	13.2	5.8	8.1	5.6	7.0
Misc. Worms	16.5	26.2	25.4	3.0	1.2	1.8	0.5	2.1
Copepoda	897.2	520.2	516.1	325.7	112.7	86.6	79.4	87.2
Ostracoda	-	1.1	1.0	1.0	7.4	4.7	9.9	5.0
Mysidacea	-	1.2	0.5	1.8	-	0.2	0.1	< 0.1
Amphipoda	-	0.1	0.5	1.3	0.6	0.8	0.3	1.0
Isopoda	-	-	-	-	-	-	-	-
Stomatopoda	-	-	-	-	-	0.1	-	-
Euphausiacea	-	-	-	1.9	7.4	6.8	4.9	5.1
Shrimp	-	3.4	2.8	49.5	2.2	1.0	0.3	2.1
Crabs	0.7	22.4	9.2	16.5	0.6	0.2	0.1	0.2
Misc. Crustaceans	0.5	13.3	10.6	6.3	0.6	0.2	0.2	0.2
Pteropoda	-	0.1	-	1.4	1.0	1.1	0.4	0.7
Misc. Mollusca	0.1	5.1	2.5	4.6	2.7	3.3	0.9	3.2
Larvacea	36.9	113.4	102.8	195.2	101.4	72.9	50.4	49.4
Misc. Tunicata	-	-	-	4.3	0.6	0.3	0.3	0.2
Leptocardia	-	-	-	0.01	< 0.01	0.03	< 0.01	0.02
Misc. Organisms	6.5	47.0	3.4	12.8	2.2	6.2	3.0	3.7
Subtotal	971.6	1504.8	972.7	768.9	315.6	257.3	189.1	206.3
Fish Eggs	0.21	1.38	1.70	13.30	0.03	0.05	0.07	0.03
Fish Larvae	0.38	0.17	0.09	8.15	0.72	0.52	0.58	0.76
Total	972.2	1506.4	974.5	790.4	316.4	257.9	189.8	207.1

Table 10.--Numbers of plankton organisms per cubic meter of water (half-meter net), cont'd

Station Number	Reg. 19	Reg. 20	Reg. 21	Reg. 22	Reg. 23	Reg. 24	Reg. 25	Reg. 26*
Protozoa	67.2	67.0	592.4	116.6	395.8	27.8	46.9	17596
Coelenterata	18.0	8.2	0.2	2.7	4.7	29.8	12.1	1980
Chaetognatha	27.4	115.5	123.7	40.8	113.9	5.8	28.3	4260
Misc. Worms	4.3	1.7	7.7	16.1	110.9	0.6	1.6	220
Copepoda	543.4	596.1	95.4	159.5	334.3	143.9	427.1	49820
Ostracoda	27.6	184.3	9.4	5.5	82.5	13.1	8.5	200
Mysidacea	-	4.5	-	-	2.5	0.3	0.9	-
Amphipoda	2.0	7.1	0.4	-	2.0	1.2	2.3	140
Isopoda	-	-	-	-	-	-	-	20
Stomatopoda	0.1	0.1	-	-	-	-	-	-
Euphausiacea	2.6	-	0.1	0.1	-	12.4	1.5	880
Shrimp	85.6	11.1	-	0.1	0.1	2.4	34.0	760
Crabs	36.8	25.7	0.3	0.7	1.8	-	7.5	1020
Misc. Crustaceans	1.4	0.6	9.9	24.3	29.3	0.1	0.6	1400
Pteropoda	1.3	-	-	-	-	0.7	1.0	40
Misc. Mollusca	5.5	4.4	1.9	6.8	30.0	6.6	7.9	240
Larvacea	70.9	108.9	7.6	31.5	79.5	76.4	38.5	6148
Misc. Tunicata	5.4	22.4	0.1	-	-	1.6	5.9	2020
Leptocardia	-	-	-	-	-	< 0.01	< 0.01	-
Misc. Organisms	23.9	257.4	1.6	1.2	50.9	11.1	19.3	3604
Subtotal	923.4	1415.0	850.7	405.9	1238.2	333.8	643.9	90348
Fish Eggs	4.04	1.04	0.09	0.02	0.03	0.38	1.82	276
Fish Larvae	7.28	0.29	0.01	-	0.16	0.44	0.95	79
Total	934.7	1416.3	850.8	405.9	1238.4	334.6	646.7	90703

* Total number of organisms in sample, water volume not determined

Table 10.--Numbers of plankton organisms per cubic meter of water (half-meter net), cont'd

Station Number	Reg. 28*	Reg. 33	Reg. 34	Reg. 35	Reg. 36	Reg. 37	Reg. 38	Reg. 40
Protozoa	3360	170.4	469.7	92.1	70.1	133.5	105.8	111.1
Coelenterata	1380	0.6	5.6	1.3	2.8	7.8	7.0	7.2
Chaetognatha	520	89.1	53.2	11.9	124.6	162.8	56.0	20.3
Misc. Worms	60	3.5	98.6	10.0	14.5	5.3	1.2	1.3
Copepoda	7120	168.2	477.5	57.6	335.9	465.8	296.2	104.5
Ostracoda	460	593.8	29.4	0.8	82.8	481.9	109.4	9.0
Mysidacea	100	0.2	0.1	-	0.4	2.1	3.4	0.1
Amphipoda	140	9.8	0.9	-	0.6	20.7	3.0	1.1
Isopoda	-	-	-	-	-	0.7	0.1	< 0.1
Stomatopoda	-	-	-	-	-	-	0.1	< 0.1
Euphausiacea	760	-	-	-	-	-	0.2	8.5
Shrimp	120	7.6	-	0.1	1.1	1.3	2.4	1.6
Crabs	60	4.7	4.1	0.3	3.8	6.1	3.7	0.5
Misc. Crustaceans	20	0.2	16.0	0.1	0.3	0.7	2.7	0.2
Pteropoda	80	0.1	-	-	-	-	0.2	3.2
Misc. Mollusca	500	8.3	14.5	0.7	3.5	7.9	2.3	6.2
Larvacea	480	5.3	150.3	23.8	4.0	85.2	53.4	54.4
Misc. Tunicata	-	-	-	-	0.1	1.1	4.3	1.6
Leptocardia	-	-	0.01	-	-	-	-	0.02
Misc. Organisms	880	266.4	13.0	0.1	8.1	88.0	79.2	5.2
Subtotal	16040	1328.2	1332.9	198.8	652.6	1470.9	730.6	336.2
Fish Eggs	16	0.52	0.01	0.07	0.47	3.12	0.22	0.03
Fish Larvae	33	0.35	0.07	0.02	0.10	0.10	0.72	0.70
Total	16089	1329.1	1333.0	198.9	653.2	1474.1	731.5	336.9

* Total number of organisms in sample, water volume not determined

Table 10.--Numbers of plankton organisms per cubic meter of water (half-meter net), cont'd

Station Number	Reg. 41	Reg. 42	Reg. 43	Reg. 44	Reg. 46	Reg. 47	Reg. 48	Reg. 49
Protozoa	108.3	143.3	35.0	3.6	8.0	219.6	356.6	169.2
Coelenterata	5.9	2.8	8.7	3.4	6.1	4.8	3.7	17.1
Chaetognatha	7.3	24.4	53.6	0.8	64.6	21.2	24.5	26.4
Misc. Worms	0.3	1.7	3.3	0.1	12.3	1.6	2.8	1.3
Copepoda	77.3	213.3	99.0	7.5	740.7	78.1	363.0	174.2
Ostracoda	5.1	15.0	27.3	0.6	47.8	28.2	19.0	11.4
Mysidacea	-	-	1.1	-	0.1	-	-	-
Amphipoda	1.6	1.0	10.9	0.3	0.8	6.4	7.3	1.8
Isopoda	-	-	-	-	-	1.1	-	-
Stomatopoda	-	0.1	-	-	-	-	-	-
Euphausiacea	3.0	1.1	-	-	0.1	1.1	1.5	1.7
Shrimp	0.4	9.5	3.8	-	0.5	1.6	22.6	3.3
Crabs	0.3	2.9	3.8	0.1	2.0	3.7	10.4	1.4
Misc. Crustaceans	0.5	0.7	0.5	-	11.2	1.6	3.7	1.5
Pteropoda	0.7	1.3	-	-	0.2	1.1	1.5	0.9
Misc. Mollusca	2.4	2.1	1.6	-	14.9	1.1	3.0	2.7
Larvacea	6.4	70.0	58.0	0.1	68.5	19.6	230.2	76.4
Misc. Tunicata	2.2	1.3	35.0	0.1	235.3	641.9	81.0	2.5
Leptocardia	-	< 0.01	-	-	-	-	-	< 0.01
Misc. Organisms	7.5	34.6	27.3	-	7.9	75.4	94.0	27.1
Subtotal	229.2	525.1	368.9	16.6	1221.0	1108.1	1224.8	518.9
Fish Eggs	0.08	11.58	1.56	0.49	0.07	0.13	1.54	0.13
Fish Larvae	1.27	3.02	1.09	-	0.02	0.76	3.03	1.03
Total	230.6	539.7	371.6	17.1	1221.1	1109.0	1229.4	520.1

Table 10.--Numbers of plankton organisms per cubic meter of water (half-meter net), cont'd

Station Number	Reg. 50	Reg. 51	Reg. 52	Reg. 53	Reg.54	Reg. 55	Reg. 56	Reg. 58*
Protozoa	200.7	97.7	169.3	215.5	78.4	60.9	55.4	5724
Coelenterata	26.8	8.7	4.6	4.2	2.6	12.3	1.8	1240
Chaetognatha	30.4	9.8	13.4	13.9	41.5	37.3	54.4	7632
Misc. Worms	4.4	2.1	1.2	1.9	1.1	2.7	18.5	160
Copepoda	177.6	140.5	169.3	186.6	101.5	294.5	380.9	40704
Ostracoda	4.9	50.9	14.6	23.0	21.1	55.9	26.2	460
Mysidacea	-	-	-	-	-	1.9	-	20
Amphipoda	2.5	3.6	2.9	3.7	6.5	2.8	0.5	100
Isopoda	-	0.2	-	-	-	-	-	-
Stomatopoda	0.1	-	-	-	-	-	-	-
Euphausiacea	13.8	2.6	1.8	1.8	0.4	-	-	-
Shrimp	1.0	3.4	11.1	5.9	13.3	1.0	-	40
Crabs	1.4	0.4	1.2	1.4	4.4	4.6	0.7	540
Misc. Crustaceans	0.4	0.3	1.1	1.9	6.5	0.9	2.6	20
Pteropoda	3.4	1.1	1.2	0.3	1.7	-	-	40
Misc. Mollusca	7.4	2.6	3.2	2.7	5.9	1.5	24.3	360
Larvacea	154.7	37.6	127.4	106.9	8.7	7.3	10.6	1780
Misc. Tunicata	31.6	11.6	12.3	14.6	41.5	26.1	2.0	820
Leptocardia	-	-	-	-	-	-	-	-
Misc. Organisms	96.1	44.5	79.0	64.5	69.2	42.2	1.6	300
Subtotal	757.2	417.6	613.6	648.8	404.3	551.9	579.5	59940
Fish Eggs	0.02	0.21	1.12	0.45	1.76	0.10	-	201
Fish Larvae	0.91	0.68	0.81	1.33	1.50	0.50	0.01	13
Total	758.1	418.5	615.5	650.6	407.6	552.5	579.5	60154

* Total number of organisms in sample, water volume not determined

Table 10.--Numbers of plankton organisms per cubic meter of water (half-meter net), cont'd

Station Number	Reg. 59*	Reg. 61*	Reg. 62*	Reg. 63*	Reg. 64	Reg. 65	Reg. 66	Reg. 67
Protozoa	3440	17384	19292	5260	73.2	149.3	218.5	15.5
Coelenterata	160	1600	2800	1420	6.0	3.4	2.0	0.1
Chaetognatha	1080	5300	560	1480	10.8	5.3	11.6	0.5
Misc. Worms	40	220	240	160	1.2	0.4	0.4	0.1
Copepoda	5200	31376	40704	6480	118.8	94.0	115.0	142.5
Ostracoda	720	8480	2000	720	4.6	9.7	67.1	0.5
Mysidacea	-	200	40	180	-	1.5	1.1	-
Amphipoda	40	1580	420	80	2.2	0.6	2.4	-
Isopoda	-	-	20	180	-	0.2	-	-
Stomatopoda	80	-	20	-	-	-	-	-
Euphausiacea	-	80	740	220	3.0	2.8	0.5	-
Shrimp	680	420	1000	220	2.3	2.8	10.5	0.3
Crabs	120	960	500	200	0.4	0.4	3.2	-
Misc. Crustaceans	40	80	-	120	0.9	0.2	1.4	0.1
Pteropoda	120	240	160	-	0.5	0.2	0.7	-
Misc. Mollusca	200	680	960	280	2.0	1.3	0.9	1.2
Larvacea	640	2320	1000	540	34.6	74.6	57.5	1.9
Misc. Tunicata	760	2440	680	280	5.2	2.1	4.3	-
Leptocardia	-	1	1	-	-	-	-	-
Misc. Organisms	1320	9752	3392	740	35.9	46.4	92.0	0.2
Subtotal	14640	83113	74529	18560	301.6	395.2	589.1	162.9
Fish Eggs	44	5	-	5	0.02	2.71	4.43	0.09
Fish Larvae	52	302	146	141	0.29	0.34	0.76	0.01
Total	14736	83420	74675	18706	301.9	398.2	594.3	163.0

* Total number of organisms in sample, water volume not determined

Table 10.--Numbers of plankton organisms per cubic meter of water (half-meter net), cont'd

Station Number	Reg. 68	Reg. 69	Reg. 70	Reg. 71	Reg. 75	Reg. 76	Reg. 77	Spc. 5
Protozoa	96.1	14.7	108.5	78.2	99.3	48.6	42.8	145.3
Coelenterata	6.7	7.3	7.6	6.9	2.6	15.8	5.4	7.2
Chaetognatha	40.9	21.3	24.5	12.8	3.4	10.5	4.2	74.8
Misc. Worms	1.4	0.1	0.6	0.7	0.8	2.0	1.3	1.1
Copepoda	256.0	61.5	198.7	262.6	172.9	521.0	360.0	271.2
Ostracoda	16.7	-	0.4	36.0	5.3	29.6	4.5	264.7
Mysidacea	-	-	-	-	-	-	-	0.1
Amphipoda	0.3	-	0.3	4.3	1.0	0.1	0.2	1.3
Isopoda	-	-	-	-	-	-	-	-
Stomatopoda	-	-	-	-	-	-	-	0.2
Euphausiacea	0.2	-	1.0	2.6	1.5	1.3	-	0.2
Shrimp	-	-	4.6	2.8	6.1	1.8	3.4	2.6
Crabs	0.4	-	1.7	0.8	1.3	2.0	2.8	11.7
Misc. Crustaceans	-	-	0.7	1.5	2.0	3.1	4.5	0.2
Pteropoda	0.3	-	0.9	1.2	0.4	1.1	-	-
Misc. Mollusca	0.4	0.7	1.7	3.4	3.7	5.7	4.2	0.8
Larvacea	52.9	0.7	145.2	24.6	48.0	60.2	73.6	41.4
Misc. Tunicata	1.2	-	5.9	5.9	5.9	3.8	53.5	-
Leptocardia	-	4.7	-	-	0.02	-	-	0.04
Misc. Organisms	4.0	-	4.3	5.0	4.8	5.8	3.3	13.9
Subtotal	477.5	111.0	506.6	449.3	359.0	712.4	563.7	836.7
Fish Eggs	6.50	0.56	3.62	0.06	0.57	1.64	0.22	0.03
Fish Larvae	0.28	0.01	1.42	0.68	0.73	0.28	0.16	0.47
Total	484.3	111.6	511.6	450.0	360.3	714.3	564.1	837.2

Table 10.--Numbers of plankton organisms per cubic meter of water (half-meter net), cont'd

Station Number	Spc. 6	Spc. 7	Spc. 9
Protozoa	14.1	30.0	29.2
Coelenterata	4.4	4.0	1.8
Chaetognatha	5.4	5.7	4.1
Misc. Worms	0.8	0.7	0.3
Copepoda	60.6	44.1	87.6
Ostracoda	7.2	10.5	9.0
Mysidacea	< 0.1	-	-
Amphipoda	0.7	0.5	< 0.1
Isopoda	-	-	-
Stomatopoda	< 0.1	< 0.1	< 0.1
Euphausiacea	2.6	1.2	4.2
Shrimp	0.7	1.8	0.4
Crabs	< 0.1	-	0.1
Misc. Crustaceans	0.2	< 0.1	-
Pteropoda	0.7	0.5	0.4
Misc. Mollusca	2.8	1.8	0.9
Larvacea	22.7	24.3	36.9
Misc. Tunicata	0.5	-	-
Leptocardia	0.03	0.06	0.02
Misc. Organisms	11.4	2.0	2.1
Subtotal	135.1	127.4	177.2
Fish Eggs	0.03	0.04	0.01
Fish Larvae	0.58	0.47	0.99
Total	135.7	127.9	178.2

Table 11.--Numbers of plankton organisms per cubic meter of water (high-speed sampler)

Tow Number	1	2	3	4	5	6	7	8
Protozoa	63.0	309.5	106.2	188.7	288.2	194.7	38.1	589.5
Coelenterata	6.5	9.1	10.1	10.2	14.7	5.3	0.9	2.0
Chaetognatha	3.2	8.4	9.4	3.0	12.5	15.8	8.2	15.1
Misc. Worms	0.6	2.9	0.3	0.4	1.2	35.5	15.5	7.3
Copepoda	52.7	89.8	100.0	60.2	155.7	2273.4	527.6	951.4
Ostracoda	-	-	39.2	8.0	47.5	-	0.2	4.1
Mysidacea	-	-	-	-	-	-	-	2.4
Amphipoda	-	2.9	2.1	1.5	1.9	-	-	2.4
Isopoda	-	-	-	-	-	1.3	-	0.7
Stomatopoda	-	-	-	-	-	-	-	-
Euphausiacea	0.9	1.1	3.1	4.9	3.8	-	-	-
Shrimp	-	1.1	3.8	3.4	3.1	3.9	0.4	1.2
Crabs	0.9	1.4	4.5	3.0	2.8	22.4	4.6	22.9
Misc. Crustaceans	1.5	2.9	3.1	0.4	0.6	39.5	6.2	21.0
Pteropoda	0.3	2.2	0.7	1.5	2.5	-	-	-
Misc. Mollusca	0.9	5.5	3.8	4.5	5.3	69.7	2.5	9.5
Larvacea	41.1	19.3	17.4	32.2	132.5	89.5	4.8	142.2
Misc. Tunicata	1.2	1.8	2.1	3.8	3.4	-	-	0.2
Leptocardia	-	-	-	-	-	-	-	-
Misc. Organisms	4.4	6.6	11.4	11.0	34.4	92.1	45.2	124.1
Subtotal	177.2	464.5	317.2	336.7	710.1	2843.1	654.2	1896.0
Fish Eggs	0.06	0.07	6.39	8.64	2.62	4.21	0.46	1.36
Fish Larvae	0.24	0.80	0.42	0.68	0.94	0.26	0.14	0.44
Total	177.5	465.4	324.0	346.0	713.7	2847.6	654.8	1897.8

Table 11.--Numbers of plankton organisms per cubic meter of water (high-speed sampler), cont'd

Tow Number	9	10	11	12	13	14	15	16
Protozoa	240.9	237.2	52.9	19.8	776.4	66.8	149.5	61.6
Coelenterata	19.5	20.4	5.1	1.9	2.9	3.7	9.9	5.6
Chaetognatha	7.8	13.0	1.9	12.5	12.7	15.2	6.1	8.1
Misc. Worms	2.6	1.1	0.6	9.5	15.3	0.4	1.0	1.1
Copepoda	874.2	196.2	79.6	78.0	378.1	603.8	349.9	82.8
Ostracoda	16.9	96.6	4.4	15.8	8.6	9.8	5.1	5.9
Mysidacea	2.9	-	-	-	-	-	-	-
Amphipoda	8.8	3.6	0.3	-	1.6	4.5	1.0	0.5
Isopoda	0.3	-	-	-	-	0.5	-	-
Stomatopoda	-	-	-	-	-	-	-	0.8
Euphausiacea	0.6	3.9	8.3	0.5	0.6	-	6.1	13.2
Shrimp	17.8	3.3	0.3	0.3	1.3	7.8	11.2	5.4
Crabs	18.2	5.2	-	0.8	1.6	16.0	3.8	2.4
Misc. Crustaceans	24.0	0.8	1.0	19.8	6.7	2.9	2.6	0.5
Pteropoda	5.5	5.0	0.3	-	-	2.0	1.9	1.6
Misc. Mollusca	10.4	11.0	2.9	4.1	3.2	5.3	4.2	2.7
Larvacea	148.0	56.1	39.2	10.9	41.4	173.8	34.0	119.7
Misc. Tunicata	37.0	8.0	0.6	-	-	130.3	4.2	4.6
Leptocardia	-	-	-	-	-	-	-	-
Misc. Organisms	199.6	120.0	7.6	4.6	128.3	49.2	13.1	7.5
Subtotal	1635.0	781.4	205.0	178.5	1378.7	1092.0	603.6	324.0
Fish Eggs	2.47	1.71	0.06	-	0.51	1.88	1.79	0.11
Fish Larvae	1.88	1.10	0.32	-	0.13	0.57	0.26	0.48
Total	1639.4	784.2	205.4	178.5	1379.3	1094.4	605.6	324.6

Table 11.--Numbers of plankton organisms per cubic meter of water (high-speed sampler), cont'd

Tow Number	17	18	19	20	21	22	23	24
Protozoa	58.2	656.2	19.7	270.5	218.1	190.1	268.6	111.6
Coelenterata	3.9	3.1	2.9	1.3	2.3	4.1	8.6	8.1
Chaetognatha	4.3	8.5	21.2	6.0	13.8	41.7	26.0	3.2
Misc. Worms	0.3	61.6	1.2	2.1	24.7	2.8	2.4	0.7
Copepoda	299.9	181.3	146.5	240.2	132.5	230.3	377.5	24.6
Ostracoda	0.3	22.4	187.0	17.7	11.4	153.5	159.7	1.4
Mysidacea	-	-	0.6	-	-	1.4	5.5	-
Amphipoda	2.3	1.0	1.2	0.3	0.3	0.7	8.6	1.8
Isopoda	0.3	-	-	-	-	-	0.3	-
Stomatopoda	0.3	-	0.3	-	-	-	-	-
Euphausiacea	3.0	0.3	-	-	-	-	-	-
Shrimp	3.0	0.3	0.6	0.3	0.3	1.0	2.7	-
Crabs	4.3	4.1	5.0	2.3	1.6	1.7	6.8	0.7
Misc. Crustaceans	1.0	24.1	1.8	8.3	2.1	1.0	4.1	-
Pteropoda	2.6	-	-	-	0.3	-	0.3	0.7
Misc. Mollusca	2.6	23.8	6.2	6.0	5.5	3.4	10.6	-
Larvacea	71.7	13.3	1.8	10.4	3.4	26.6	221.4	2.1
Misc. Tunicata	8.6	1.0	-	-	-	0.3	25.7	1.8
Leptocardia	-	-	-	-	-	-	-	-
Misc. Organisms	19.1	5.8	28.2	3.9	9.9	12.1	145.2	7.7
Subtotal	485.7	1006.8	424.2	569.3	426.2	670.7	1274.0	164.4
Fish Eggs	0.92	0.48	0.41	0.10	0.21	0.83	0.89	0.70
Fish Larvae	0.59	0.27	0.24	0.21	0.21	0.41	0.27	0.07
Total	487.2	1007.6	424.8	569.6	426.6	671.9	1275.2	165.2

Table 11.--Numbers of plankton organisms per cubic meter of water (high-speed sampler), cont'd

Tow Number	25	26	27	28	29	30	31	32
Protozoa	111.4	205.2	85.3	164.6	227.7	223.0	32.9	9.4
Coelenterata	2.6	11.5	14.1	9.6	12.3	3.4	6.8	10.9
Chaetognatha	8.0	5.5	6.5	6.4	5.8	7.6	8.9	33.7
Misc. Worms	0.6	0.7	1.1	0.8	1.4	0.3	2.0	0.8
Copepoda	96.4	166.1	111.4	130.8	176.0	89.9	279.5	836.6
Ostracoda	1.4	18.0	7.9	4.7	7.4	0.9	86.0	60.9
Mysidacea	-	-	0.3	-	-	-	-	0.4
Amphipoda	7.7	4.1	2.7	0.6	2.1	8.8	7.5	2.5
Isopoda	-	-	-	-	-	-	-	-
Stomatopoda	-	-	-	-	-	-	-	-
Euphausiacea	-	4.4	6.8	7.6	10.9	0.3	0.3	0.2
Shrimp	3.1	0.7	1.4	1.9	0.8	3.6	1.7	0.6
Crabs	14.2	1.6	-	0.4	0.6	11.6	5.8	7.1
Misc. Crustaceans	0.8	2.1	2.2	1.1	0.6	1.5	1.4	146.2
Pteropoda	0.8	1.4	1.9	2.1	1.8	0.9	0.3	-
Misc. Mollusca	-	4.1	5.4	3.6	6.0	-	52.0	7.5
Larvacea	8.2	56.2	36.4	94.7	42.4	171.3	4.1	11.9
Misc. Tunicata	192.7	9.7	4.3	2.1	3.7	109.9	882.1	69.0
Leptocardia	-	-	-	-	-	-	-	-
Misc. Organisms	108.4	65.9	22.0	51.9	23.6	106.6	244.2	37.0
Subtotal	556.3	557.2	309.7	482.9	523.1	739.6	1615.5	1234.7
Fish Eggs	2.95	0.09	0.05	0.08	0.04	2.86	0.14	0.19
Fish Larvae	1.42	0.78	0.71	1.19	0.62	9.51	1.30	0.11
Total	560.7	558.1	310.5	484.2	523.8	752.0	1616.9	1235.0

Table 11.--Numbers of plankton organisms per cubic meter of water (high-speed sampler), cont'd

Tow Number	33	34	35	36	37	38	39	40
Protozoa	16.7	94.3	184.5	352.3	124.5	189.0	162.5	236.4
Coelenterata	17.0	63.8	11.4	15.9	12.3	30.4	3.6	5.2
Chaetognatha	31.3	19.1	13.6	6.2	3.6	5.6	2.6	4.3
Misc. Worms	4.1	0.8	0.6	2.0	0.3	0.6	-	0.7
Copepoda	443.5	302.5	318.7	536.0	231.7	469.2	98.2	77.5
Ostracoda	17.7	94.3	3.5	11.4	3.8	79.3	2.2	1.3
Mysidacea	1.0	1.0	-	2.0	-	-	-	-
Amphipoda	0.3	5.0	6.0	1.1	2.2	6.8	-	0.7
Isopoda	-	-	-	-	-	-	-	-
Stomatopoda	-	-	-	-	-	-	-	0.4
Euphausiacea	-	-	3.2	2.3	1.9	6.0	0.4	0.4
Shrimp	-	4.7	57.0	21.0	19.4	15.3	4.4	2.4
Crabs	3.1	3.4	3.8	3.1	1.4	2.9	0.4	0.7
Misc. Crustaceans	40.1	3.1	2.5	3.1	1.9	1.0	-	0.6
Pteropoda	0.3	0.3	2.2	2.3	1.9	4.0	0.4	0.7
Misc. Mollusca	3.1	4.2	3.2	4.3	5.7	13.2	1.8	2.0
Larvacea	20.7	2.6	134.2	189.7	84.0	48.9	13.5	88.7
Misc. Tunicata	7.5	19.1	140.9	11.9	52.1	54.0	0.7	8.6
Leptocardia	-	-	-	-	-	-	-	-
Misc. Organisms	7.5	119.3	161.0	44.3	69.5	114.8	5.8	12.4
Subtotal	613.9	737.5	1046.3	1208.9	616.2	1041.0	296.5	443.0
Fish Eggs	-	0.26	1.58	0.17	0.49	0.29	2.85	4.42
Fish Larvae	-	0.16	3.29	0.06	0.60	0.29	0.07	0.93
Total	613.9	737.9	1051.2	1209.1	617.3	1041.6	299.4	448.4

Table 11.--Numbers of plankton organisms per cubic meter of water (high-speed sampler), cont'd

Tow Number	41	42	43
Protozoa	129.9	3.2	72.2
Coelenterata	7.0	0.5	17.7
Chaetognatha	3.5	-	12.9
Misc. Worms	0.6	-	0.6
Copepoda	116.6	4.2	642.8
Ostracoda	-	-	22.9
Mysidacea	-	-	0.3
Amphipoda	1.3	-	5.2
Isopoda	-	-	-
Stomatopoda	-	-	-
Euphausiacea	0.3	-	1.3
Shrimp	5.7	-	4.2
Crabs	0.3	-	5.2
Misc. Crustaceans	3.5	0.5	6.4
Pteropoda	1.3	0.5	2.2
Misc. Mollusca	1.9	0.9	7.1
Larvacea	172.2	1.8	60.6
Misc. Tunicata	10.5	-	57.7
Leptocardia	-	-	-
Misc. Organisms	40.8	6.0	60.6
Subtotal	495.4	17.6	979.9
Fish Eggs	1.08	3.15	1.16
Fish Larvae	0.83	1.11	0.45
Total	497.3	21.9	981.5

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler)

Run No. 1 Date January 21-22, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	2251	2353	0055	0157	0259	0401	0503	0605
Position of Ship: (N. Lat.	29°43'	29°36'	29°26'	29°18'	29°10'	29°03'	29°00'	29°02'
(W. Long.	77°06'	77°05'	77°06'	77°05'	77°02'	77°00'	77°00'	77°00'
Protozoa	6.6	-	-	-	-	3.3	9.9	3.3
Coelenterata	6.6	3.3	-	-	3.3	3.3	-	6.6
Chaetognatha	9.9	-	3.3	3.3	3.3	3.3	-	3.3
Misc. Worms	-	-	-	-	-	-	-	-
Copepoda	59.2	9.9	9.9	9.9	36.2	16.4	19.7	19.7
Ostracoda	-	-	-	-	3.3	-	-	-
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	-	-	-	-	-	-	-	-
Crabs	-	-	-	-	-	3.3	-	-
Misc. Crustaceans	-	-	-	-	-	-	3.3	-
Mollusca	-	-	-	-	-	3.3	-	-
Invertebrate Eggs	-	-	3.3	-	-	3.3	13.2	-
Misc. Organisms	19.7	16.4	6.6	3.3	3.3	-	9.9	6.6
Subtotal	102.0	29.6	23.1	16.5	49.4	36.2	56.0	39.5
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	102.0	29.6	23.1	16.5	49.4	36.2	56.0	39.5

Run No. 2 Date January 22, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	0734	0836	0938	1040	1142	1244	1346	1448
Position of Ship: (N. Lat.	28°50'	28°41'	28°32'	28°24'	28°16'	28°07'	28°01'	28°00'
(W. Long.	77°00'	77°00'	76°59'	76°58'	76°58'	76°59'	77°00'	77°00'
Protozoa	-	6.3	-	12.6	-	-	-	-
Coelenterata	-	3.2	6.3	3.2	-	-	-	-
Chaetognatha	-	12.6	-	3.2	3.2	-	3.2	3.2
Misc. Worms	-	-	-	-	-	-	-	-
Copepoda	12.6	28.4	50.4	22.0	6.3	12.6	44.1	12.6
Ostracoda	-	-	-	-	-	-	-	-
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	-	-	3.2	-	-	-	-	-
Crabs	-	-	-	-	-	-	-	-
Misc. Crustaceans	-	-	-	-	-	-	-	-
Mollusca	-	-	-	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	25.2	22.0	31.5	22.0	12.6	9.4	12.6	6.3
Subtotal	37.8	72.5	91.4	63.0	22.1	22.0	59.9	22.1
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	37.8	72.5	91.4	63.0	22.1	22.0	59.9	22.1

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), cont'd

Run No. 3 Date January 23, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	1354	1456	1558	1700	1802	1904	2006	2108
Position of Ship: (N. Lat.)	26°20'	26°20'	26°20'	26°20'	26°20'	26°20'	26°20'	26°20'
(W. Long.)	76°44'	76°44'	76°44'	76°44'	76°44'	76°44'	76°44'	76°44'
Protozoa	-	5.8	-	-	-	-	2.9	2.9
Coelenterata	2.9	-	14.4	2.9	2.9	-	-	-
Chaetognatha	2.9	-	2.9	2.9	5.8	-	-	-
Misc. Worms	-	-	-	-	-	-	-	-
Copepoda	37.4	11.5	17.3	5.8	20.2	8.6	2.9	-
Ostracoda	-	-	-	-	-	-	-	2.9
Amphipoda	-	-	-	-	-	-	-	2.9
Shrimp	-	-	2.9	-	2.9	-	-	-
Crabs	2.9	-	-	-	-	-	-	-
Misc. Crustaceans	8.6	5.8	-	-	2.9	-	-	2.9
Mollusca	-	-	-	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	8.6	5.8	2.9	5.8	2.9	5.8	2.9	5.8
Subtotal	63.3	28.9	40.4	17.4	37.6	14.4	8.7	17.4
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	63.3	28.9	40.4	17.4	37.6	14.4	8.7	17.4

Run No. 4 Date January 23-24,1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	2157	2257	2357	0057	0157	0257	0357	0457
Position of Ship: (N. Lat.)	26°20'	26°20'	26°20'	26°20'	26°20'	26°20'	26°20'	26°20'
(W. Long.)	76°44'	76°44'	76°44'	76°44'	76°44'	76°44'	76°44'	76°44'
Protozoa	-	-	6.5	3.2	6.5	-	9.7	9.7
Coelenterata	-	3.2	-	-	-	3.2	-	-
Chaetognatha	3.2	-	-	-	-	3.2	6.5	6.5
Misc. Worms	-	-	-	-	-	-	-	-
Copepoda	9.7	-	9.7	3.2	16.2	-	25.9	16.2
Ostracoda	3.2	-	-	-	-	-	3.2	3.2
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	-	3.2	-	-	-	-	-	9.7
Crabs	-	-	-	-	-	-	-	-
Misc. Crustaceans	-	-	-	-	-	-	6.5	-
Mollusca	-	-	-	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	6.5	9.7	-	-	3.2	3.2	-	6.5
Subtotal	22.6	16.1	16.2	6.4	25.9	9.6	51.8	51.8
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	22.6	16.1	16.2	6.4	25.9	9.6	51.8	51.8

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), cont'd

Run No. 5 Date January 24, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	0747	0848	0949	1050	1151	1252	1353	1454
Position of Ship: (N. Lat.	26°20'	26°20'	26°20'	26°20'	26°20'	26°20'	26°20'	26°20'
(W. Long.	76°44'	76°44'	76°44'	76°44'	76°44'	76°44'	76°44'	76°44'
Protozoa	-	-	3.0	3.0	3.0	3.0	6.0	-
Coelenterata	-	-	-	-	-	-	-	-
Chaetognatha	-	-	-	3.0	9.1	3.0	-	-
Misc. Worms	-	-	-	-	-	-	-	-
Copepoda	6.0	-	12.1	9.1	3.0	15.1	3.0	-
Ostracoda	-	-	-	-	-	-	-	-
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	3.0	-	-	-	-	-	-	-
Crabs	-	-	-	-	-	-	-	-
Misc. Crustaceans	-	3.0	3.0	-	3.0	-	-	6.0
Mollusca	-	-	-	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	-	-	3.0	3.0	9.1	-	6.0	3.0
Subtotal	9.0	3.0	21.1	18.1	27.2	21.1	15.0	9.0
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	9.0	3.0	21.1	18.1	27.2	21.1	15.0	9.0

Run No. 6 Date January 24-25, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	1639	1749	1859	2009	2119	2229	2339	0049
Position of Ship: (N. Lat.	26°20'	26°20'	26°20'	26°20'	26°20'	26°20'	26°20'	26°20'
(W. Long.	76°44'	76°44'	76°44'	76°44'	76°44'	76°44'	76°44'	76°44'
Protozoa	-	-	2.7	2.7	2.7	-	-	5.5
Coelenterata	-	-	-	-	-	-	-	8.2
Chaetognatha	-	-	-	-	-	-	-	-
Misc. Worms	-	-	-	-	-	-	-	-
Copepoda	5.5	5.5	2.7	-	16.4	19.2	19.2	2.7
Ostracoda	-	-	-	-	2.7	-	-	2.7
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	-	-	-	-	-	-	-	-
Crabs	-	-	-	-	-	-	-	2.7
Misc. Crustaceans	2.7	-	2.7	-	-	5.5	-	5.5
Mollusca	-	-	-	-	-	-	-	-
Invertebrate Eggs	5.5	-	2.7	-	-	-	-	2.7
Misc. Organisms	-	2.7	-	-	2.7	5.5	5.5	2.7
Subtotal	13.7	8.2	10.8	2.7	24.5	30.2	24.7	32.7
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	13.7	8.2	10.8	2.7	24.5	30.2	24.7	32.7

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), cont'd

Run No. 7 Date January 30, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	0959	1102	1205	1308	1411	1514	1617	1720
Position of (N. Lat.	27°02'	27°00'	27°00'	27°00'	27°02'	27°02'	27°01'	27°05'
Ship: (W. Long.	79°18'	79°23'	79°35'	79°42'	79°44'	79°52'	80°01'	80°04'
Protozoa	5.5	-	2.7	2.7	-	-	5.5	-
Coelenterata	-	2.7	-	-	2.7	-	-	-
Chaetognatha	-	-	-	-	-	2.7	-	-
Misc. Worms	2.7	-	-	-	-	-	-	-
Copepoda	21.9	13.7	24.7	11.0	11.0	38.4	19.2	19.2
Ostracoda	-	-	-	-	-	-	-	-
Amphipoda	-	-	-	-	-	2.7	-	2.7
Shrimp	-	-	-	-	-	-	-	-
Crabs	-	-	-	-	-	-	-	-
Misc. Crustaceans	-	-	2.7	-	-	-	-	-
Mollusca	-	-	-	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	13.7	8.2	8.2	8.2	5.5	16.4	-	5.5
Subtotal	43.8	24.6	38.3	21.9	19.2	60.2	24.7	27.4
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	43.8	24.6	38.3	21.9	19.2	60.2	24.7	27.4

Run No. 8 Date January 30-31, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	1833	1938	2044	2149	2255	2400	0106	0211
Position of (N. Lat.	27°17'	27°25'	27°34'	27°39'	27°41'	27°40'	27°44'	27°47'
Ship: (W. Long.	80°04'	80°03'	80°04'	80°05'	79°54'	79°40'	79°40'	79°40'
Protozoa	3.4	3.4	3.4	-	6.8	-	-	6.8
Coelenterata	3.4	-	-	-	10.2	-	6.8	-
Chaetognatha	6.8	3.4	3.4	-	3.4	-	-	3.4
Misc. Worms	-	3.4	-	-	-	-	-	-
Copepoda	17.0	6.8	20.4	6.8	34.0	27.2	27.2	17.0
Ostracoda	10.2	6.8	6.8	-	-	-	-	-
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	-	-	-	-	-	-	10.2	-
Crabs	-	-	-	-	-	-	-	6.8
Misc. Crustaceans	6.8	-	-	-	-	-	10.2	6.8
Mollusca	-	-	6.8	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	20.4	-	-	-
Misc. Organisms	6.8	10.2	34.0	13.6	3.4	17.0	20.4	13.6
Subtotal	54.4	34.0	74.8	20.4	78.2	44.2	74.8	54.4
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	3.4	-	-	-
Total	54.4	34.0	74.8	20.4	81.6	44.2	74.8	54.4

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), cont'd

Run No. 9 Date January 31 & February 1, 1954								
Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	2055	2145	2235	2325	0015	0105	0155	0245
Position of (N. Lat.	27°40'	27°41'	27°45'	27°50'	27°55'	28°00'	28°00'	28°00'
Ship: (W. Long.	79°18'	79°16'	79°13'	79°08'	79°03'	79°00'	79°00'	79°00'
Protozoa	-	5.2	-	-	5.2	-	-	-
Coelenterata	5.2	5.2	-	5.2	-	-	-	-
Chaetognatha	5.2	-	-	-	-	-	-	-
Misc. Worms	-	-	-	-	-	-	-	-
Copepoda	41.8	52.3	5.2	5.2	5.2	52.3	20.9	15.7
Ostracoda	-	-	-	-	-	-	-	-
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	-	-	-	-	-	-	-	-
Crabs	15.7	-	-	-	-	-	-	5.2
Misc. Crustaceans	15.7	-	-	-	-	-	5.2	-
Mollusca	-	-	-	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	10.5	26.2	15.7	-	20.9	5.2	-	20.9
Subtotal	94.1	88.9	20.9	10.4	31.3	57.5	26.1	41.8
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	94.1	88.9	20.9	10.4	31.3	57.5	26.1	41.8

Run No. 10 Date February 1, 1954								
Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	0413	0519	0625	0731	0837	0943	1049	1155
Position of (N. Lat.	28°06'	28°13'	28°17'	28°17'	28°18'	28°18'	28°19'	28°19'
Ship: (W. Long.	79°11'	79°20'	79°26'	79°29'	79°38'	79°47'	79°57'	80°08'
Protozoa	8.5	19.8	5.7	-	2.8	-	-	-
Coelenterata	5.7	-	-	5.7	-	-	-	-
Chaetognatha	5.7	-	-	-	-	2.8	-	-
Misc. Worms	-	-	-	2.8	-	-	-	-
Copepoda	39.6	45.3	36.8	28.3	34.0	34.0	36.8	11.3
Ostracoda	-	-	-	-	-	-	-	-
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	-	-	-	-	-	-	-	-
Crabs	8.5	2.8	2.8	-	-	-	-	2.8
Misc. Crustaceans	5.7	2.8	-	-	-	-	-	2.8
Mollusca	-	-	-	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	-	11.3	11.3	8.5	2.8	14.2	8.5	2.8
Subtotal	73.7	82.0	56.6	45.3	39.6	51.0	45.3	19.7
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	73.7	82.0	56.6	45.3	39.6	51.0	45.3	19.7

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), cont'd

Run No. 11 Date February 1, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	1333	1439	1545	1651	1757	1903	2009	2115
Position of (N. Lat.	28°20'	28°20'	28°23'	28°31'	28°40'	28°47'	28°52'	28°59'
Ship: (W. Long.	80°20'	80°30	80°27'	80°23'	80°24'	80°25'	80°28'	80°31'
Protozoa	-	-	-	3.2	-	3.2	3.2	-
Coelenterata	-	-	-	-	-	-	-	-
Chaetognatha	9.7	-	-	6.4	3.2	12.9	3.2	-
Misc. Worms	-	-	-	-	-	-	3.2	-
Copepoda	64.4	112.7	315.6	135.2	186.8	325.2	199.6	286.6
Ostracoda	-	-	-	-	-	6.4	-	6.4
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	-	-	-	-	-	-	-	-
Crabs	3.2	-	-	3.2	6.4	6.4	-	-
Misc. Crustaceans	-	-	-	3.2	-	6.4	6.4	12.9
Mollusca	-	-	-	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	16.1	9.7	6.4	6.4	9.7	12.9	6.4	16.1
Subtotal	93.4	122.4	322.0	157.6	206.1	373.4	222.0	322.0
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	93.4	122.4	322.0	157.6	206.1	373.4	222.0	322.0

Run No. 12 Date February 1-2, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	2300	2359	0059	0158	0258*	0357	0457	0556
Position of (N. Lat.	29°00'	29°00'	29°02'	29°01'	29°00'	29°03'	29°03'	29°02'
Ship: (W. Long.	80°16'	80°10'	80°02'	79°54'	79°47'	79°46'	79°38'	79°28'
Protozoa	-	-	6.2	-	-	-	-	6.2
Coelenterata	-	-	6.2	-	-	-	-	12.3
Chaetognatha	-	-	-	6.2	-	-	12.3	12.3
Misc. Worms	-	-	-	-	-	-	-	-
Copepoda	227.9	61.6	49.3	24.6	-	49.3	92.4	166.3
Ostracoda	-	-	12.3	6.2	-	-	6.2	24.6
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	24.6	6.2	-	-	-	-	-	-
Crabs	-	6.2	-	-	-	-	-	-
Misc. Crustaceans	-	-	-	6.2	-	6.2	12.3	12.3
Mollusca	-	-	-	-	-	-	6.2	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	18.5	6.2	6.2	-	-	24.6	18.5	61.6
Subtotal	271.0	80.2	80.2	43.2	-	80.1	147.9	295.6
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	271.0	80.2	80.2	43.2	-	80.1	147.9	295.6

* No sample

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), cont'd

Run No. 13 Date February 4, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	0755	0859	1004	1108	1213	1317	1422	1526
Position of Ship: (N. Lat.	29°56'	29°46'	29°40'	29°40'	29°39'	29°40'	29°40'	29°40'
(W. Long.	81°13'	81°10'	81°08'	80°57'	80°44	80°34'	80°24'	80°18'
Protozoa	-	8.5	21.2	84.6	42.3	4.2	8.5	12.7
Coelenterata	-	8.5	-	-	-	-	-	-
Chaetognatha	-	16.9	4.2	25.4	4.2	8.5	12.7	8.5
Misc. Worms	-	-	-	-	-	4.2	-	4.2
Copepoda	88.8	16.9	16.9	249.6	131.1	118.4	63.4	249.6
Ostracoda	-	-	-	-	-	-	-	-
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	-	-	-	-	-	-	-	16.9
Crabs	4.2	-	-	4.2	-	4.2	-	-
Misc. Crustaceans	29.6	-	8.5	-	-	-	4.2	4.2
Mollusca	-	-	-	-	-	4.2	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	4.2	4.2	-	16.9	8.5	25.4	16.9	55.0
Subtotal	126.8	55.0	50.8	380.7	186.1	169.1	105.7	351.1
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	126.8	55.0	50.8	380.7	186.1	169.1	105.7	351.1

Run No. 14 Date February 4-5, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	1641	1747	1854	2000	2107	2213	2320	0026
Position of Ship: (N. Lat.	29°40'	29°41'	29°41'	29°40'	29°39'	29°44'	29°53'	30°03'
(W. Long.	80°05'	80°00'	79°54'	79°43'	79°36'	79°35'	79°33'	79°30'
Protozoa	4.7	-	-	9.3	9.3	23.3	-	-
Coelenterata	4.7	-	4.7	-	-	-	-	14.0
Chaetognatha	4.7	-	-	4.7	4.7	-	4.7	-
Misc. Worms	-	-	-	-	-	-	-	-
Copepoda	172.4	9.3	41.9	46.6	79.2	233.0	191.1	37.3
Ostracoda	-	-	-	-	-	9.3	-	4.7
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	-	-	-	-	4.7	4.7	18.6	-
Crabs	-	-	-	-	-	9.3	-	-
Misc. Crustaceans	-	-	-	-	-	14.0	23.3	-
Mollusca	-	-	-	-	-	9.3	-	-
Invertebrate Eggs	-	-	-	-	-	4.7	-	-
Misc. Organisms	14.0	9.3	-	-	4.7	23.3	14.0	18.6
Subtotal	200.5	18.6	46.6	60.6	102.6	330.9	251.7	74.6
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	200.5	18.6	46.6	60.6	102.6	330.9	251.7	74.6

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), cont'd

Run No. 15 Date February 5, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	0520	0621	0722	0823	0924	1025	1126	1227
Position of Ship: (N. Lat.	30°23'	30°22'	30°20'	30°18'	30°18'	30°18'	30°20'	30°19'
(W. Long.	79°29'	79°35'	79°41'	79°49'	79°58'	80°06'	80°12'	80°17'
Protozoa	6.1	-	6.1	-	12.3	-	18.4	-
Coelenterata	12.3	-	-	-	-	-	6.1	-
Chaetognatha	-	-	-	-	12.3	6.1	12.3	-
Misc. Worms	-	-	-	-	-	-	6.1	-
Copepoda	104.2	18.4	18.4	42.9	42.9	98.1	478.1	18.4
Ostracoda	-	-	-	-	-	-	-	-
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	-	-	-	-	-	-	6.1	-
Crabs	-	-	-	-	-	-	-	-
Misc. Crustaceans	18.4	-	6.1	-	-	6.1	6.1	6.1
Mollusca	-	-	-	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	24.5	18.4	18.4	6.1	18.4	24.5	42.9	6.1
Subtotal	165.5	36.8	49.0	49.0	85.9	134.8	576.1	30.6
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	165.5	36.8	49.0	49.0	85.9	134.8	576.1	30.6

Run No. 16 Date February 5, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	1603	1708	1813	1918				
Position of Ship: (N. Lat.	30°20'	30°19'	30°20'	30°21'				
(W. Long.	80°49'	80°58'	81°07'	81°15'				
Protozoa	-	14.1	28.2	-				
Coelenterata	-	-	-	-				
Chaetognatha	14.1	35.2	21.1	21.1				
Misc. Worms	-	-	7.0	7.0				
Copepoda	98.6	49.3	154.9	105.6				
Ostracoda	-	211.2	260.5	-				
Amphipoda	-	-	-	7.0				
Shrimp	-	-	-	-				
Crabs	-	7.0	-	7.0				
Misc. Crustaceans	-	7.0	7.0	14.1				
Mollusca	-	-	-	7.0				
Invertebrate Eggs	-	-	-	-				
Misc. Organisms	70.4	42.2	35.2	14.1				
Subtotal	183.1	366.0	513.9	182.9				
Fish Eggs	-	-	-	-				
Fish Larvae	-	-	-	-				
Total	183.1	366.0	513.9	182.9				

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), cont'd

Run No. 17 Date February 10, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	0820	0922	1025	1127	1230	1332	1435	1537
Position of (N. Lat.	31°01'	31°01'	31°02'	31°07'	31°16'	31°20'	31°26'	31°34'
Ship: (W. Long.	80°50'	81°01'	81°07'	81°05'	81°00'	80°55'	80°49'	80°41'
Protozoa	41.3	75.8	206.7	89.6	165.4	-	6.9	-
Coelenterata	-	-	-	-	-	-	-	-
Chaetognatha	27.6	20.7	27.6	6.9	-	-	6.9	-
Misc. Worms	-	-	-	-	-	-	-	-
Copepoda	192.9	144.7	144.7	241.2	68.9	20.7	20.7	27.6
Ostracoda	55.1	96.5	27.6	13.8	6.9	-	-	-
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	-	-	-	-	-	-	-	-
Crabs	-	-	-	6.9	-	-	6.9	-
Misc. Crustaceans	6.9	-	6.9	13.8	-	-	-	-
Mollusca	-	-	-	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	6.9	20.7	13.8	-	6.9	-	6.9	13.8
Subtotal	330.7	358.4	427.3	372.2	248.1	20.7	48.3	41.4
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	330.7	358.4	427.3	372.2	248.1	20.7	48.3	41.4

Run No. 18 Date February 10-11, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	1645	1746	1847	1948	2049	2150	2251	2352
Position of (N. Lat.	31°40'	31°39'	31°38'	31°37'	31°36'	31°36'	31°35'	31°32'
Ship: (W. Long.	80°36'	80°26'	80°18'	80°08'	79°55'	79°50'	79°39'	79°30'
Protozoa	5.1	-	5.1	-	36.0	5.1	25.7	20.6
Coelenterata	-	-	-	-	-	-	-	-
Chaetognatha	10.3	15.4	20.6	-	5.1	10.3	10.3	5.1
Misc. Worms	-	-	-	15.4	-	-	-	-
Copepoda	107.9	15.4	61.7	113.1	149.1	66.8	143.9	25.7
Ostracoda	15.4	10.3	10.3	30.8	30.8	30.8	15.4	-
Amphipoda	-	-	-	-	5.1	-	-	-
Shrimp	-	-	-	-	-	-	-	-
Crabs	-	-	5.1	-	5.1	-	-	5.1
Misc. Crustaceans	5.1	-	-	5.1	5.1	-	15.4	-
Mollusca	5.1	-	-	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	10.3	10.3	-	20.6	5.1	-	15.4	5.1
Subtotal	159.2	51.4	102.8	185.0	241.4	113.0	226.1	61.6
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	159.2	51.4	102.8	185.0	241.4	113.0	226.1	61.6

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), cont'd

Run No. 19 Date February 11, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	0231	0332	0434	0535	0637	0738		
Position of (N. Lat.	31°36'	31°34'	31°35'	31°35'	31°35'	31°36'		
Ship: (W. Long.	78°59'	78°48'	78°43'	78°42'	78°41'	78°39'		
Protozoa	4.2	8.5	21.2	12.7	-	8.5		
Coelenterata	4.2	-	-	-	-	4.2		
Chaetognatha	8.5	4.2	-	4.2	4.2	8.5		
Misc. Worms	-	4.2	4.2	-	-	-		
Copepoda	131.1	25.4	63.4	25.4	21.2	101.5		
Ostracoda	8.5	4.2	38.1	4.2	4.2	16.9		
Amphipoda	-	4.2	-	-	-	-		
Shrimp	-	-	4.2	-	-	-		
Crabs	-	-	-	-	-	-		
Misc. Crustaceans	4.2	4.2	-	4.2	8.5	-		
Mollusca	4.2	-	-	-	-	-		
Invertebrate Eggs	-	-	-	-	-	-		
Misc. Organisms	21.2	4.2	8.5	-	-	16.9		
Subtotal	186.1	59.1	139.6	50.7	38.1	156.5		
Fish Eggs	-	-	-	-	-	-		
Fish Larvae	-	-	-	-	-	-		
Total	186.1	59.1	139.6	50.7	38.1	156.5		

Run No. 20 Date February 14, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	1147	1249	1352	1454	1557	1659	1802	1904
Position of (N. Lat.	32°28'	32°18'	32°12'	32°07'	32°01'	31°57'	31°52'	31°48'
Ship: (W. Long.	79°45'	79°38'	79°33'	79°29'	79°20'	79°16'	79°10'	79°05'
Protozoa	4.2	4.2	8.5	8.5	-	8.5	8.5	-
Coelenterata	-	-	-	-	-	-	-	-
Chaetognatha	-	-	-	4.2	4.2	8.5	4.2	4.2
Misc. Worms	-	-	-	-	-	-	-	-
Copepoda	12.8	29.8	12.8	51.0	63.8	80.8	97.8	25.5
Ostracoda	-	-	-	-	-	-	-	-
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	-	-	-	-	-	-	-	-
Crabs	-	-	-	4.2	4.2	-	-	-
Misc. Crustaceans	-	-	4.2	8.5	4.2	-	-	-
Mollusca	-	-	-	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms		-	4.2	4.2	-	17.0	12.8	8.5
Subtotal	17.0	34.0	29.7	80.6	76.4	114.8	123.3	38.2
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	17.0	34.0	29.7	80.6	76.4	114.8	123.3	38.2

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), cont'd

Run No. 21 Date February 14-15, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	2015	2122	2229	2336	0043	0150	0257	0404
Position of Ship: (N. Lat.	31°42'	31°43'	31°43'	31°39'	31°32'	31°30'	31°33'	31°41'
(W. Long.	79°00'	78°58'	78°53'	78°49'	78°43'	78°39'	78°35'	78°26'
Protozoa	-	28.5	9.5	9.5	-	-	-	-
Coelenterata	-	9.5	-	-	-	-	-	-
Chaetognatha	4.8	-	-	-	4.8	-	-	14.2
Misc. Worms	-	-	-	-	-	-	-	-
Copepoda	85.5	61.8	80.8	76.0	38.0	23.8	9.5	42.8
Ostracoda	14.2	-	9.5	-	-	-	-	-
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	-	-	-	-	-	-	-	-
Crabs	-	-	-	-	-	-	-	-
Misc. Crustaceans	9.5	9.5	4.8	9.5	9.5	-	-	-
Mollusca	-	-	4.8	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	14.2	9.5	9.5	14.2	14.2	4.8	4.8	4.8
Subtotal	128.2	118.8	118.9	109.2	66.5	28.6	14.3	61.8
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	128.2	118.8	118.9	109.2	66.5	28.6	14.3	61.8

Run No. 22 Date February 15, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	0521	0623	0726	0828	0931	1033	1136	1238
Position of Ship: (N. Lat.	31°51'	31°54'	31°56'	32°00'	32°06'	32°11'	32°13'	32°18'
(W. Long.	78°13'	78°06'	78°08'	78°15'	78°23'	78°26'	78°27'	78°32'
Protozoa	-	5.5	5.5	2.8	-	2.8	19.4	11.1
Coelenterata	-	-	-	2.8	-	-	-	-
Chaetognatha	-	2.8	2.8	-	-	5.5	5.5	2.8
Misc. Worms	-	-	-	-	-	-	-	-
Copepoda	66.5	58.2	63.7	47.1	41.6	44.3	80.3	36.0
Ostracoda	2.8	-	2.8	-	-	-	-	-
Amphipoda	-	-	-	2.8	-	-	-	-
Shrimp	-	-	-	-	-	-	-	-
Crabs	-	-	-	-	-	-	-	-
Misc. Crustaceans	2.8	-	19.4	2.8	2.8	-	-	-
Mollusca	-	-	-	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	11.1	8.3	13.8	5.5	11.1	2.8	8.3	13.8
Subtotal	83.2	74.8	108.0	63.8	55.5	55.4	113.5	63.7
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	83.2	74.8	108.0	63.8	55.5	55.4	113.5	63.7

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), cont'd

Run No. 23 Date February 15, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	1400	1504	1607	1711	1814	1918	2021	2125
Position of Ship: (N. Lat.)	32°26'	32°27'	32°33'	32°41'	32°46'	32°53'	32°57'	33°02'
(W. Long.)	78°43'	78°46'	78°54'	79°00'	79°04'	79°12'	79°14'	79°06'
Protozoa	23.3	17.5	11.6	11.6	23.3	-	-	-
Coelenterata	-	-	-	-	-	-	-	-
Chaetognatha	11.6	11.6	5.8	-	-	5.8	-	17.5
Misc. Worms	-	-	-	-	-	-	-	-
Copepoda	110.6	151.3	139.7	52.4	75.7	75.7	17.5	389.9
Ostracoda	11.6	-	-	5.8	11.6	5.8	-	11.6
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	-	-	-	-	-	-	-	-
Crabs	-	-	-	-	-	-	-	-
Misc. Crustaceans	-	5.8	-	-	-	-	5.8	-
Mollusca	-	-	-	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	23.3	17.5	93.1	40.7	-	34.9	17.5	17.5
Subtotal	180.4	203.7	250.2	110.5	110.6	122.2	40.8	436.5
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	180.4	203.7	250.2	110.5	110.6	122.2	40.8	436.5

Run No. 24 Date February 15-16, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	2242	2345	0049	0152	0256	0359	0503	0606
Position of Ship: (N. Lat.)	33°12'	33°22'	33°30'	33°28'	33°21'	33°18'	33°11'	33°03'
(W. Long.)	79°01'	78°59'	78°56'	78°51'	78°41'	78°38'	78°29'	78°22'
Protozoa	28.0	-	-	-	-	14.0	28.0	-
Coelenterata	-	-	-	-	-	-	14.0	-
Chaetognatha	-	21.0	-	14.0	7.0	14.0	21.0	-
Misc. Worms	7.0	-	-	-	-	-	-	-
Copepoda	238.0	196.0	119.0	98.0	77.0	84.0	217.0	35.0
Ostracoda	7.0	-	7.0	7.0	7.0	-	35.0	-
Amphipoda	-	-	-	-	-	-	14.0	7.0
Shrimp	-	-	-	-	-	-	-	-
Crabs	-	-	-	-	-	-	-	-
Misc. Crustaceans	42.0	49.0	7.0	7.0	7.0	-	-	7.0
Mollusca	-	-	-	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	28.0	7.0	7.0	-	14.0	14.0	7.0	14.0
Subtotal	350.0	273.0	140.0	126.0	112.0	126.0	336.0	63.0
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	350.0	273.0	140.0	126.0	112.0	126.0	336.0	63.0

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), cont'd

Run No. 25 Date February 16, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	0726	0830	0935	1039	1144	1248	1353	1457
Position of (N. Lat.	33°00'	32°52'	32°48'	32°45'	32°38'	32°34'	32°32'	32°25'
Ship: (W. Long.	78°16'	78°08'	78°04'	78°00'	77°54'	77°50'	77°47'	77°41'
Protozoa	21.6	-	-	-	-	21.6	-	-
Coelenterata	-	21.6	-	-	-	-	-	-
Chaetognatha	-	-	-	-	-	-	21.6	-
Misc. Worms	-	-	-	-	-	-	-	-
Copepoda	259.0	280.5	43.2	54.0	43.2	54.0	215.8	194.2
Ostracoda	-	-	-	-	-	-	-	10.8
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	-	-	-	-	-	-	-	-
Crabs	-	-	-	-	-	-	-	-
Misc. Crustaceans	43.2	32.4	-	-	-	21.6	21.6	10.8
Mollusca	-	-	-	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	-	97.1	54.0	32.4	21.6	32.4	10.8	43.2
Subtotal	323.8	431.6	97.2	86.4	64.8	129.6	269.8	259.0
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	323.8	431.6	97.2	86.4	64.8	129.6	269.8	259.0

Run No. 26 Date February 16, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	1606	1708	1811	1913	2016	2118	2221	2323
Position of (N. Lat.	32°21'	32°21'	32°26'	32°30'	32°33'	32°36'	32°39'	32°45'
Ship: (W. Long.	77°32'	77°29'	77°22'	77°11'	77°03'	76°54'	76°50'	76°54'
Protozoa	-	9.0	-	17.9	-	26.8	62.6	26.8
Coelenterata	-	-	-	-	-	9.0	-	-
Chaetognatha	-	9.0	-	9.0	9.0	-	9.0	9.0
Misc. Worms	-	-	-	-	-	-	-	-
Copepoda	98.4	349.0	537.0	98.4	44.8	134.2	116.4	44.8
Ostracoda	-	107.4	71.6	9.0	9.0	17.9	-	-
Amphipoda	-	-	-	9.0	-	-	-	-
Shrimp	-	-	-	-	-	-	9.0	-
Crabs	-	-	-	-	-	-	-	-
Misc. Crustaceans	-	-	9.0	-	-	-	9.0	17.9
Mollusca	-	-	9.0	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	44.8	62.6	134.2	71.6	35.8	17.9	17.9	71.6
Subtotal	143.2	537.0	760.8	214.9	98.6	205.8	223.9	170.1
Fish Eggs	-	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	143.2	537.0	760.8	214.9	98.6	205.8	223.9	170.1

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), cont'd

Run No. 27 Date February 20, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	1036	1140	1243	1347	1450	1554	1657	1801
Position of Ship: (N. Lat.	34°28'	34°24'	34°18'	34°11'	34°03'	33°58'	33°55'	33°49'
(W. Long.	76°56'	77°06'	77°08'	77°08'	77°10'	77°13'	77°08'	77°02'
Protozoa	9.7	14.6	-	29.1	77.6	29.1	24.2	-
Coelenterata	-	-	-	-	-	9.7	-	-
Chaetognatha	-	-	-	14.6	4.8	-	-	-
Misc. Worms	-	-	-	-	-	-	-	-
Copepoda	53.4	53.4	24.2	92.2	310.4	121.2	203.7	19.4
Ostracoda	4.8	-	-	-	4.8	-	-	-
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	-	-	-	-	-	-	4.8	-
Crabs	-	-	-	-	-	-	-	-
Misc. Crustaceans	-	-	-	-	-	-	-	9.7
Mollusca	-	-	-	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	4.8	9.7	4.8	9.7	24.2	77.6	48.5	14.6
Subtotal	72.7	77.7	29.0	145.6	421.8	237.6	281.2	43.7
Fish Eggs	-	-	-	-	4.8	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	72.7	77.7	29.0	145.6	426.6	237.6	281.2	43.7

Run No. 28 Date February 20-21, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	1910	2012	2115	2217	2320	0022	0125	0227
Position of Ship: (N. Lat.	33°43'	33°40'	33°33'	33°28'	33°27'	33°26'	33°21'	33°17'
(W. Long.	76°56'	76°52'	76°44'	76°38'	76°37'	76°36'	76°32'	76°26'
Protozoa	-	-	64.7	35.3	5.9	-	-	-
Coelenterata	-	-	-	5.9	-	-	-	-
Chaetognatha	-	5.9	5.9	5.9	-	5.9	11.8	5.9
Misc. Worms	-	-	-	-	-	-	-	-
Copepoda	135.2	64.7	211.7	223.4	94.1	100.0	88.2	11.8
Ostracoda	5.9	5.9	29.4	5.9	-	11.8	5.9	-
Amphipoda	-	-	5.9	-	-	-	-	-
Shrimp	-	5.9	-	5.9	-	-	-	-
Crabs	-	-	-	-	-	-	-	-
Misc. Crustaceans	5.9	-	5.9	11.8	5.9	5.9	-	-
Mollusca	-	-	5.9	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	41.2	35.3	82.3	23.5	5.9	41.2	17.6	23.5
Subtotal	188.2	117.7	411.7	317.6	111.8	164.8	123.5	41.2
Fish Eggs	-	-	-	5.9	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	188.2	117.7	411.7	323.5	111.8	164.8	123.5	41.2

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), cont'd

Run No. 29 Date February 21, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	0355	0455	0555	0655	0755	0855	0955	1055
Position of Ship: (N. Lat.	33°16'	33°18'	33°26'	33°34'	33°43'	33°53'	34°00'	34°09'
(W. Long.	76°21'	76°23'	76°20'	76°22'	76°24'	76°27'	76°28'	76°30'
Protozoa	-	22.5	-	30.0	67.5	-	7.5	30.0
Coelenterata	-	-	-	-	-	-	-	-
Chaetognatha	-	7.5	7.5	7.5	15.0	7.5	7.5	7.5
Misc. Worms	-	-	7.5	-	-	-	-	-
Copepoda	7.5	292.5	165.0	142.5	360.0	82.5	127.5	120.0
Ostracoda	-	-	-	7.5	7.5	-	7.5	-
Amphipoda	-	-	-	7.5	-	-	-	-
Shrimp	-	-	-	-	7.5	-	-	-
Crabs	-	-	-	-	-	-	-	-
Misc. Crustaceans	-	-	7.5	7.5	-	-	7.5	-
Mollusca	-	-	-	-	-	7.5	7.5	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	-	52.5	7.5	30.0	37.5	15.0	45.0	22.5
Subtotal	7.5	375.0	195.0	232.5	495.0	112.5	210.0	180.0
Fish Eggs	-	7.5	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	7.5	382.5	195.0	232.5	495.0	112.5	210.0	180.0

Run No. 30 Date February 22, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	1233	1338	1443	1548	1653	1758	1903	2008
Position of Ship: (N. Lat.	34°13'	34°06'	34°03'	34°07'	34°16'	34°25'	34°36'	34°41'
(W. Long.	76°22'	76°16'	76°14'	76°09'	76°04'	75°59'	75°56'	75°54'
Protozoa	53.7	17.9	17.9	17.9	9.0	9.0	9.0	-
Coelenterata	-	-	17.9	-	-	-	-	-
Chaetognatha	-	-	9.0	9.0	9.0	-	9.0	-
Misc. Worms	-	-	-	9.0	-	-	-	-
Copepoda	689.2	71.6	98.4	214.8	143.2	35.8	125.3	80.6
Ostracoda	9.0	-	-	9.0	17.9	-	-	-
Amphipoda	-	-	-	-	-	-	-	-
Shrimp	-	-	-	-	-	9.0	-	17.9
Crabs	-	-	-	-	-	-	-	-
Misc. Crustaceans	17.9	-	35.8	9.0	9.0	-	-	17.9
Mollusca	-	-	-	-	-	-	-	-
Invertebrate Eggs	-	-	-	-	-	-	-	-
Misc. Organisms	35.8	26.8	53.7	44.8	35.8	26.8	44.8	35.8
Subtotal	805.6	116.3	232.7	232.7	223.9	80.6	188.1	152.2
Fish Eggs	9.0	-	-	-	-	-	-	-
Fish Larvae	-	-	-	-	-	-	-	-
Total	814.6	116.3	232.7	232.7	223.9	80.6	188.1	152.2

Table 12.--Numbers of plankton organisms per cubic meter of water (continuous plankton sampler), cont'd

Run No. 31 Date February 22-23, 1954

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)	2120	2221	2321	0022				
Position of Ship: (N. Lat.	34°50'	34°54'	34°58'	35°00'				
(W. Long.	76°05'	76°08'	76°01'	75°45'				
Protozoa	60.0	12.0	12.0	36.0				
Coelenterata	12.0	-	-	-				
Chaetognatha	-	12.0	-	12.0				
Misc. Worms	-	-	-	-				
Copepoda	912.0	24.0	84.0	924.0				
Ostracoda	24.0	-	-	12.0				
Amphipoda	-	-	-	-				
Shrimp	-	-	-	-				
Crabs	12.0	-	-	-				
Misc. Crustaceans	12.0	-	-	12.0				
Mollusca	-	-	-	-				
Invertebrate Eggs	204.0	-	-	-				
Misc. Organisms	108.0	12.0	-	72.0				
Subtotal	1344.0	60.0	96.0	1068.0				
Fish Eggs	-	-	-	-				
Fish Larvae	-	-	-	-				
Total	1344.0	60.0	96.0	1068.0				

Run No. Date

Compartment No.	1	2	3	4	5	6	7	8
Time (EST)								
Position of Ship: (N. Lat.								
(W. Long.								
Protozoa								
Coelenterata								
Chaetognatha								
Misc. Worms								
Copepoda								
Ostracoda								
Amphipoda								
Shrimp								
Crabs								
Misc. Crustaceans								
Mollusca								
Invertebrate Eggs								
Misc. Organisms								
Subtotal								
Fish Eggs								
Fish Larvae								
Total								

Table 13.--List of the species of fish in dip-net, trolling, and stomach contents collections (D-dip net; T-trolling; S-stomach contents)

Acanthurus sp. S
Agonostomus monticola (Bancroft) D
Aluteridae, unidentified S
Amanses pullus (Ranzani) ? S
Anchoa sp. D S
Antennarius sp. S
Centrobranchus nigroocellatus (Günther) D
Chaetodon striatus Linnaeus ? S
Coryphaena hippurus Linnaeus D T
Cypselurus comatus (Mitchill) D
Cypselurus exsiliens (Linnaeus) D
Cypselurus furcatus (Mitchill) D
Cypselurus heterurus (Rafinesque) D
Danichthys rondeletii (Valenciennes) D
Decapterus punctatus (Agassiz) S
Decapterus punctatus ? S
Diodon hystrix Linnaeus ? D
Echilidae ? S
Engraulidae, unidentified S
Etrumeus sadina (Mitchill) S
Euleptorhamphus velox Poey D
Euthynnus alletteratus (Rafinesque) T
Exocoetus obtusirostris Günther D
Fistularia tabacaria Linnaeus ? S
Gadidae, unidentified S
Gempylus serpens Cuvier ? S
Hemiramphus balao Lesueur D
Hemiramphus brasiliensis (Linnaeus) D
Heterosoma larva, unidentified S
Hirundichthys affinis (Günther) D
Hirundichthys affinis ? D
Histrio histrio (Linnaeus) D
Holocentrus bullisi Woods D
Hygophum reinhardti (Lütken) D
Kyphosus incisor (Cuvier) D
Kyphosus sectatrix (Linnaeus) D
Leptocephali, unidentified S
Lutianus sp. ? D
Membras martinica (Valenciennes) D
Mugil cephalus Linnaeus D
Mullus auratus Jordan & Gilbert D
Myctophum affine (Lütken) D
Myctophum asperum Richardson D
Myctophum obtusirostris Taning D
Myctophum rufinum Taning D
Naucrates ductor (Linnaeus) T
Nomeus gronovii (Gmelin) D
Ophidiidae, unidentified S
Parexocoetus brachypterus (Richardson) D
Peprilus alepidotus (Linnaeus) D S
Phtheirichthys lineatus (Menzies) D
Prionotus sp. S
Prognichthys gibbifrons (Valenciennes) D
Pseudupeneus maculatus (Bloch) D
Pterolamiops longimanus (Poey) T
Raja eglanteria Bosc T
Remora remora (Linnaeus) T
Sarda sarda (Bloch) D
Scomber sp. D
Scomber colias Gmelin D S
Scomberesox saurus (Walbaum) D
Seriola dumerili (Risso) D
Sphaeroides sp. D
Squalus acanthias Linnaeus T
Stephanolepis hispidus (Linnaeus) D
Stephanolepis setifer (Bennett) D
Strongylura ardeola (Valenciennes) D
Syngnathus dunckeri Metzelaar S
Syngnathus pelagicus Linnaeus D
Syngnathus springeri Herald S
Thunnus atlanticus (Lesson) T
Trachinocephalus myops (Forster) ? D
Urophycis regius (Walbaum) D

Table 14.--Numbers and species of fish taken by trolling

Species	Date (1954)	Time (EST)	Location N.lat.	Location W.long.	Sex	Stage Gonad Devel.	Fork Length (mm.)	Weight (lbs.)	Stomach Contents
Pterolamiops longimanus /1	Jan. 24	0900	26°21'	76°46'	F	?	2110 /2	--	none
" /1	Jan. 24	1430	26°21'	76°46'	M	I	1754 /2	--	fish remains, unidentified (2); cephalopod beaks
" /1	Jan. 24	1620	26°21'	76°46'	M	I	1875 /2	--	Echelidae ? (2); squid remains (11)
Squalus acanthias /1	Feb. 17	1900	34°16'	77°43'	M	-- /3	787 /2	--	--
Raja eglanteria /1	Feb. 17	1945	34°16'	77°43'	-	--	--	--	--
Euthynnus alletteratus	Feb. 5	1620	30°19'	80°51'	F	I	718	12.2	fish remains, unidentified (1); unidentified worm
"	Feb. 14	1205	32°27'	79°42'	F	I	683	8.2	Syngnathus springeri (10); Scomber colias (43); Peprilus alepidotus (5); Prionotus sp. (2); leptocephalus, unidentified (1); Gadidae, unidentified (8); fish remains, unidentified (77); squid (1); stomatopod (1); heteropod (1)
"	Feb. 14	1420	32°10'	79°31'	M	VII	692	8.0	fish remains, unidentified (65); squid (4)
"	Feb. 17	1147	33°47'	77°38'	M	I	690	7.0	Etrumeus sadina (1)
"	Feb. 17	1155	33°48'	77°38'	F	I	692	8.0	Etrumeus sadina (11); Engraulidae, unidentified (5); fish remains, unidentified (4)
"	Feb. 20	1115	34°25'	77°03'	M	VII	675	8.0	Anchoa sp. (15); fish remains, unidentified (3)

/1 Hook and line
/2 Total length
/3 Three young born on deck

Table 14.--Numbers and species of fish taken by trolling (cont'd)

Species	Date (1954)	Time (EST)	Location N.lat.	Location W.long.	Sex	Stage Gonad Devel.	Fork Length (mm.)	Weight (lbs.)	Stomach Contents
E. alletteratus (cont'd)	Feb. 20	1430	34°05'	77°09'	F	I	722	10.3	Decapterus punctatus (4); fish remains, unidentified (2)
"	Feb. 20	1422	34°06'	77°09'	M	I-II	502	2.5	coral fragments
"	Feb. 20	1450	34°02'	77°10'	F	I	653	8.3	Decapterus punctatus ? (1)
"	Feb. 20	1707	33°54'	77°07'	F	I	504	4.0	Etrumeus sadina (57); Aluteridae, unidentified (1); fish remains, unidentified (47)
"	Feb. 20	1745	33°50'	77°04'	M	I	523	3.0	none
Thunnus atlanticus	Jan. 23	0940	26°46'	77°04'	M	II	493	5.5	Syngnathus dunckeri (1); Fistularia tabacaria ? (1); Chaetodon striatus ? (1); Acanthurus sp. (3); Antennarius sp. (1); Ophidiidae, unidentified (2); leptocephali, unidentified (23); heterosomid larva, unidentified (1); fish remains, unidentified (13); squid (3); stomatopods (6); decapods (11); amphipods (5)
Coryphaena hippurus	Jan. 21	0945	30°26'	78°20'	F	IV-V	667	4.2	Gempylus serpens ? (1); Amanses pullus ? (1)
"	Jan. 25	1410	25°13'	77°07'	M	V	705	5.8	--
Naucrates ductor	Jan. 24	1615	26°21'	76°46'	F	IV-V	246/4	--	fish remains, unidentified (1); gastropod (1); decapod remains
Remora remora (2)/5	Jan. 24	0900	26°21'	76°46'	-	--	98,158/4	--	--
"/5	Jan. 24	1430	26°21'	76°46'	-	--	144/4	--	--
"/5	Jan. 24	1620	26°21'	76°46'	-	--	91/4	--	--

/4 Standard length
/5 Removed from P. longimanus

Table 15.--Numbers and species of fish taken by dip net

Species	Location of capture, number and size range (in standard length) of specimens
ENGRAULIDAE	
Anchoa sp.	-Reg. 76, (1) 53 mm.
SYNODIDAE	
Trachinocephalus myops ?	-Spc. 5, (1) 40 mm.
MYCTOPHIDAE	
Hygophum reinhardti	-Std., 1/24/54, 1600-2400, (1) 39 mm. TO, 25°32'N., 76°13'W., 1/27/54, (4) 23.5-39 mm. TO, 1/28/54, (1) 32 mm. Spc. 5, (1) 22 mm.
Myctophum rufinum	-TO, 1/27/54, (2) 23-82.5 mm.
Myctophum affine	-Std., 1/23/54, 1400-2400, (3) 17.5-65 mm. Std., 1/24/54, 0000-0600, (1) 34 mm. Std., 1/24/54, 1600-2400, (39) 20-59.5 mm. TO, 1/27/54, (27) 19.5-76 mm. TO, 1/28/54, (3) 21-34 mm. Spc. 5, (4) 29-77 mm. Reg. 7, (9) 25-68 mm.
Myctophum asperum	-TO, 1/27/54, (1) 61 mm. TO, 1/28/54, (1) 70 mm. Spc. 5, (1) 33 mm. Reg. 41, (1) 27 mm.
Myctophum obtusirostris	-Reg. 15, (6) 16-37.5 mm.
Centrobranchus nigroocellatus	-Std., 1/24/55, 1600-2400, (6) 23.5-26.5 mm. TO, (14) 24.5-27.5 mm.
BELONIDAE	
Strongylura ardeola	-Std., 1/23/54, 2300, (1) 197 mm. Std., 1/24/54, 0000-0600, (6) 65-110 mm. Std., 1/24-25/54, 2000-0600, (1) 66.5 mm. Spc. 9, (2) 242-244 mm. Reg. 6, (1) 215 mm.
SCOMBERESOCIDAE	
Scomberesox saurus	-Reg. 63, (1) 34 mm.
HEMIRAMPHIDAE	
Hemiramphus brasiliensis	-Spc. 5, (1) 61.5 mm.
Hemiramphus balao	-Std., 1/23/54, 1400-2400, (1) 50 mm. Reg. 8, (1) 158 mm.
Euleptorhamphus velox	-Std., 1/23/54, 2300, (2) 171-185 mm. Spc. 5, (1) 116 mm.

Table 15.--Numbers and species of fish taken by dip net (cont'd)

Species	Location of capture, number and size range (in standard length) of specimens
EXOCOETIDAE	
Parexocoetus brachypterus	-Std., 1/23/54, 1400-2400, (1) 64.5 mm. Spc. 9, (1) 83 mm. Reg. 6, (18) 87-113 mm. Reg. 8, (1) 108 mm. Reg. 14, (23) 96.5-125 mm.
Exocoetus obtusirostris	-Std., 1/23/54, 1400-2400, (2) 28-30 mm. TO, 1/27-28/54, 1800-0130, (7) 29-40.5 mm. TO, 1/28/54, (14) 7.3-32 mm. Spc. 9, (1) 79 mm. Reg. 1, (1) 8 mm. Reg. 6, (1) 34 mm.
Cypselurus exsiliens	-Reg. 15, (1) 215 mm.
Cypselurus comatus	-Std., 1/24/54, 1600-2400, (1) 30 mm. TO, (1) 33 mm.
Cypselurus heterurus	-Std., 1/23/54, 1400-2400, (7) 46-84 mm. Std., 1/24/54, 0000-0600, (1) 40 mm. Std., 1/24/54, 2115, (1) 182 mm. TO, 1/27-28/54, 1800-0200, (3) 136-226 mm. Spc. 9, (2) 172-180 mm. Reg. 5, (3) 41.5-189 mm. Reg. 6, (2) 90-184 mm. Reg. 14, (2) 191-204 mm. Reg. 15, (1) 169 mm. Reg. 17, (1) 213 mm. Reg. 41, (2) 21.5-24.5 mm. Reg. 49, (1) 13.5 mm. Reg. 63, (1) 25.5 mm.
Cypselurus furcatus	-Std., 1/23/54, 1400-2400, (1) 59 mm. Std., 1/24/54, 0000-0600, (1) 32 mm. Std., 1/24-25/54, 2200-0600, (1) 36 mm. TO, 1/27-28/54, 1800-0130, (1) 19.5 mm. TO, 1/28/54, (4) 10-15.5 mm.
Prognichthys gibbifrons	-Reg. 41, (2) 19.5-25 mm.
Danichthys rondeletii	-Reg. 40, (1) 32.5 mm. Reg. 41, (3) 24.5-26 mm.
Hirundichthys affinis	-Std., 1/23/54, 1400-2400, (9) 45-107 mm. Std., 1/24/54, 0000-0600, (1) 60 mm. Std., 1/24/54, 2210, (1) 189 mm. TO, (1) 202 mm. Spc. 9, (2) 59.5-99 mm. Reg. 5, (1) 31.5 mm. Reg. 7, (4) 192-205 mm. Reg. 17, (2) 43.5-199 mm. Reg. 41, (1) 23 mm.
Hirundichthys affinis ?	-Reg. 49, (1) 9.8 mm.

Table 15.--Numbers and species of fish taken by dip net (cont'd)

Species	Location of capture, number and size range (in standard length) of specimens
GADIDAE	
Urophycis regius	-Reg. 20, (2) 23-24.5 mm. Reg. 37, (2) 19.5-20.5 mm. Reg. 38, (1) 20 mm. Reg. 46, (1) 29.5 mm. Reg. 53, (1) 17.5 mm. Reg. 54, (3) 8.8-13.5 mm. Reg. 55, (4) 24.5-35 mm. Reg. 75, (1) 23 mm.
Urophycis sp./1	-Reg. 20, (2) 16-19 mm.
Urophycis sp.	-Reg. 53, (1) 11 mm.
HOLOCENTRIDAE	
Holocentrus bullisi	-Spc. 9, (1) 29 mm.
SYNGNATHIDAE	
Syngnathus pelagicus	-Std., 1/24/55, 0000-0600, (1) 114 mm. TO, 1/27-28/54, 1800-0130, (2) 34-37 mm. TO, 1/28/54, (3) 31-46 mm. Reg. 49, (2) 78-101 mm.
ATHERINIDAE	
Membras martinica	-Reg. 23, (1) 106 mm.
MUGILIDAE	
Mugil cephalus	-Std., 1/24/54, (2) 22.4-31 mm. TO, 1/27/54, (1) 27.4 mm. TO, 1/28/54, (1) 13.2 mm. Reg. 4, (1) 22.8 mm. Reg. 5, (1) 21.9 mm. Reg. 6, (2) 21.9-22.7 mm. Reg. 15, (9) 23-26.9 mm. Reg. 20, (4) 20-24 mm. Reg. 37, (22) 19.6-24 mm. Reg. 38, (58) 20-25 mm. Reg. 49, (1) 12.1 mm. Reg. 75, (6) 20-23 mm. Reg. 76, (5) 17-26.9 mm.
Agonostomus monticola	-Std., 1/23/54, 1400-2400, (1) 28.1 mm. Std., 1/24/54, 1600-2400, (1) 28.6 mm. TO, 1/27/54, (2) 24.1-31.3 mm. TO, 1/28/54, (1) 29.4 mm.

/1 *Urophycis chuss* (Walbaum) or *U. tenuis* (Mitchill)

Table 15.--Numbers and species of fish taken by dip net (cont'd)

Species	Location of capture, number and size range (in standard length) of specimens
SCOMBRIDAE	
Scomber sp.	-Reg. 61, (6) 26-32.5 mm. Reg. 76, (1) 34.5 mm.
Scomber colias	-Reg. 55, (1) 25.5 mm.
Sarda sarda	-Reg. 61, (1) 31 mm.
CORYPHAENIDAE	
Coryphaena hippurus	-Std., 1/23/54, (1) 64.5 mm. Std., 1/24/54, (1) 194 mm. Std., 1/24-25/54, (2) 16.1-95 mm. TO, 1/27-28/54, (1) 110 mm. TO, 1/28/54, (6) 11.4-100 mm. Reg. 4, (1) 70 mm. Reg. 6, (13) 32.5-204 mm. Reg. 7, (3) 67-155 mm. Reg. 8, (1) 56.5 mm. Reg. 9, (1) 57.5 mm. Reg. 15, (1) 40.5 mm. Reg. 41, (1) 58.5 mm. Reg. 48, (1) 14 mm. Reg. 75, (1) 13.9 mm.
STROMATEIDAE	
Peprilus alepidotus	-Reg. 48, (1) 9.5 mm.
NOMEIDAE	
Nomeus gronovii	-Reg. 4, (1) 14 mm. Reg. 7, (1) 38 mm. Reg. 9, (1) 32.5 mm. Reg. 15, (3) 16.5-44 mm. Reg. 16, (3) 17-36 mm.
CARANGIDAE	
Seriola dumerili	-Reg. 41, (1) 30 mm. Reg. 49, (1) 19.4 mm.
LUTIANIDAE	
Lutianus sp. ?	-Std., 1/23/54, 1400-2400, (2) 23.5-24 mm. Std., 1/24/54, 1600-2400, (1) 22.5 mm. TO, (16) 22.5-24.5 mm.
KYPHOSIDAE	
Kyphosus sectatrix	-Std., 1/23/54, 1400-2400, (1) 26 mm. Std., 1/24/54, 1600-2400, (1) 12.5 mm. TO, (2) 10.5-36 mm.
Kyphosus incisor	-TO, (1) 54.5 mm.

Table 15.--Numbers and species of fish taken by dip net (cont'd)

Species	Location of capture, number and size range (in standard length) of specimens
MULLIDAE	
Mullus auratus	-Reg. 6, (3) 18-21.5 mm.
Pseudupeneus maculatus	-TO, 1/27/54, (1) 58 mm. TO, 1/28/54, (1) 58.5 mm. Spc. 9, (18) 45-55.5 mm. Reg. 5, (1) 41.5 mm.
ECHENEIDAE	
Phtheirichthys lineatus	-Spc. 9, (1) 409 mm.
ALUTERIDAE	
Stephanolepis hispidus	-Reg. 49, (5) 16-33 mm. Reg. 53, (15) 11.5-26 mm.
Stephanolepis setifer	-Reg. 41, (1) 17 mm.
TETRAODONTIDAE	
Sphaeroides sp.	-Reg. 20, (2) 9-10.5 mm. Reg. 49, (2) 7.5-14.5 mm. Reg. 53, (1) 9.5 mm.
DIODONTIDAE	
Diodon hystrix ?	-TO, (1) 145 mm.
ANTENNARIIDAE	
Histrio histrio	-TO, (1) 22 mm. Std., 1/23/54, 1400-2400, (7) 9.5-15 mm. Reg. 1, (2) 11-12.5 mm. Reg. 16, (9) 11-22 mm. Reg. 41, (4) 10-12 mm.

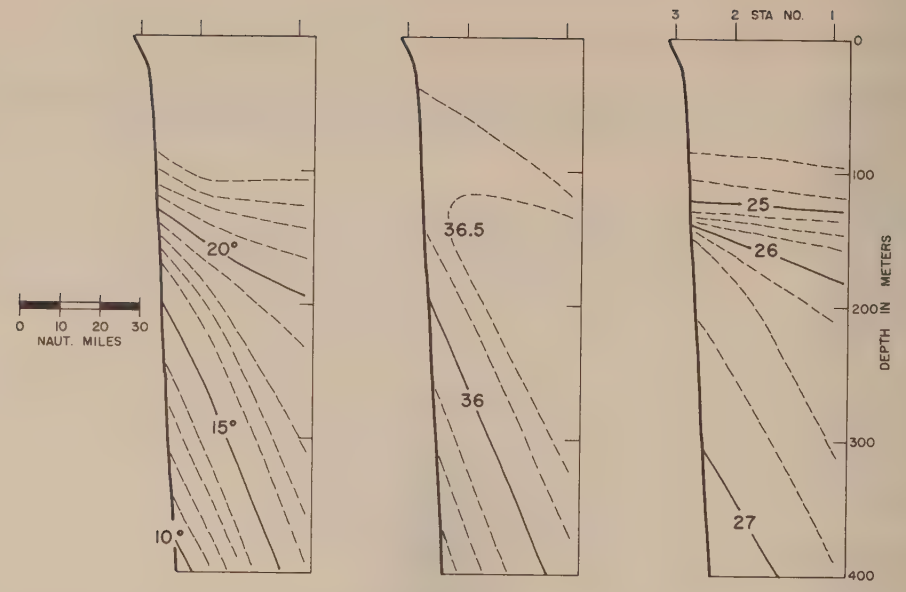

Figure 5.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 1, 2, and 3 (Jupiter Section).

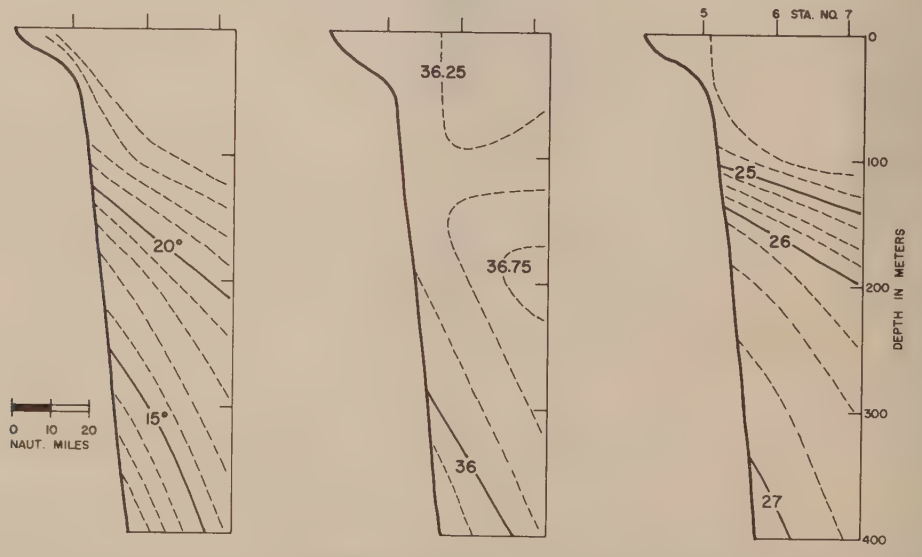

Figure 6.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 5, 6, and 7 (Vero Section).

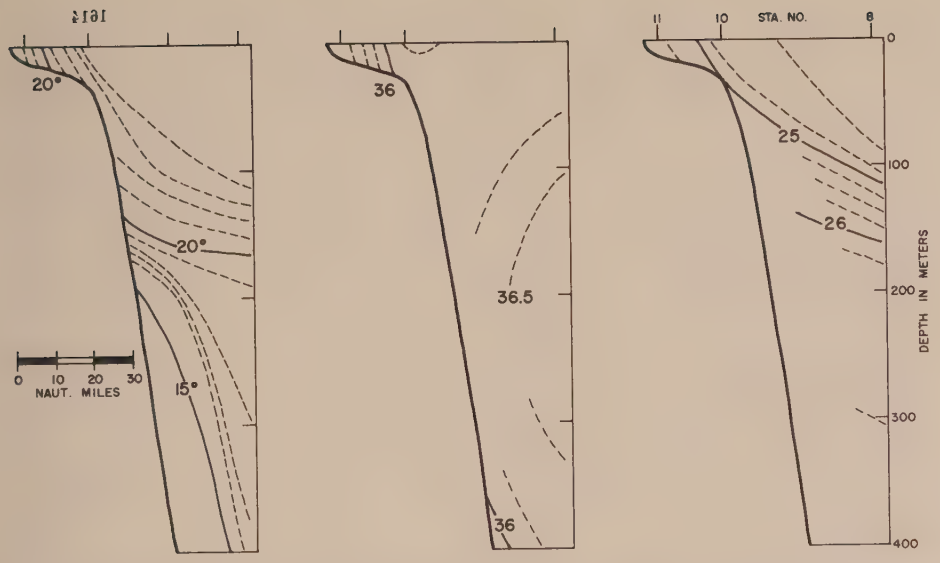

Figure 7.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 8, 10, and 11 (Canaveral Section).

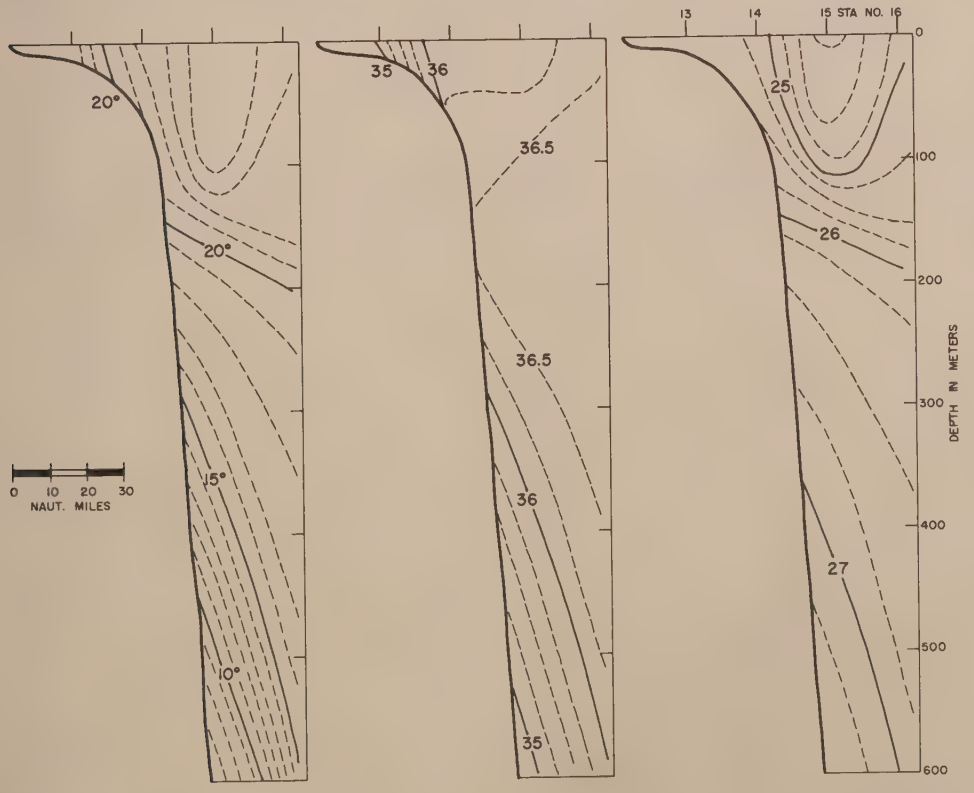

Figure 8.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 13, 14, 15, and 16 (Ponce de Leon Section).

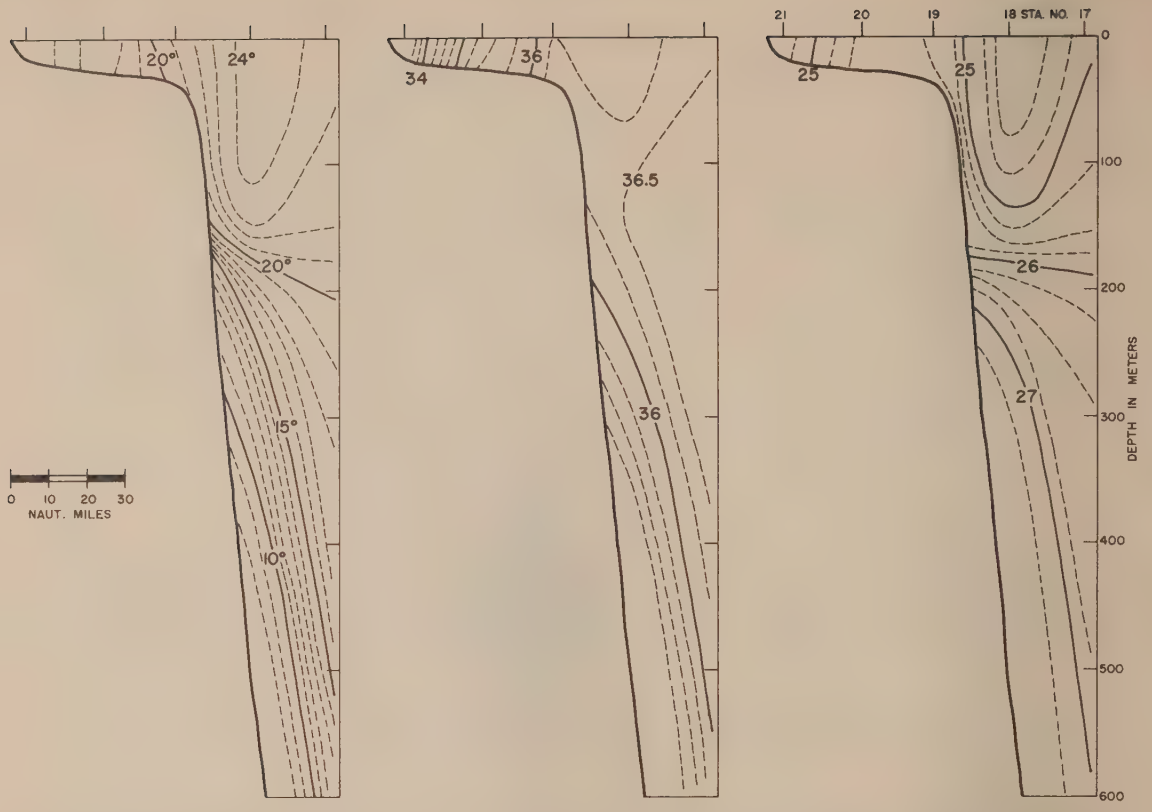

Figure 9.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 17, 18, 19, 20, and 21 (Matanzas Section).

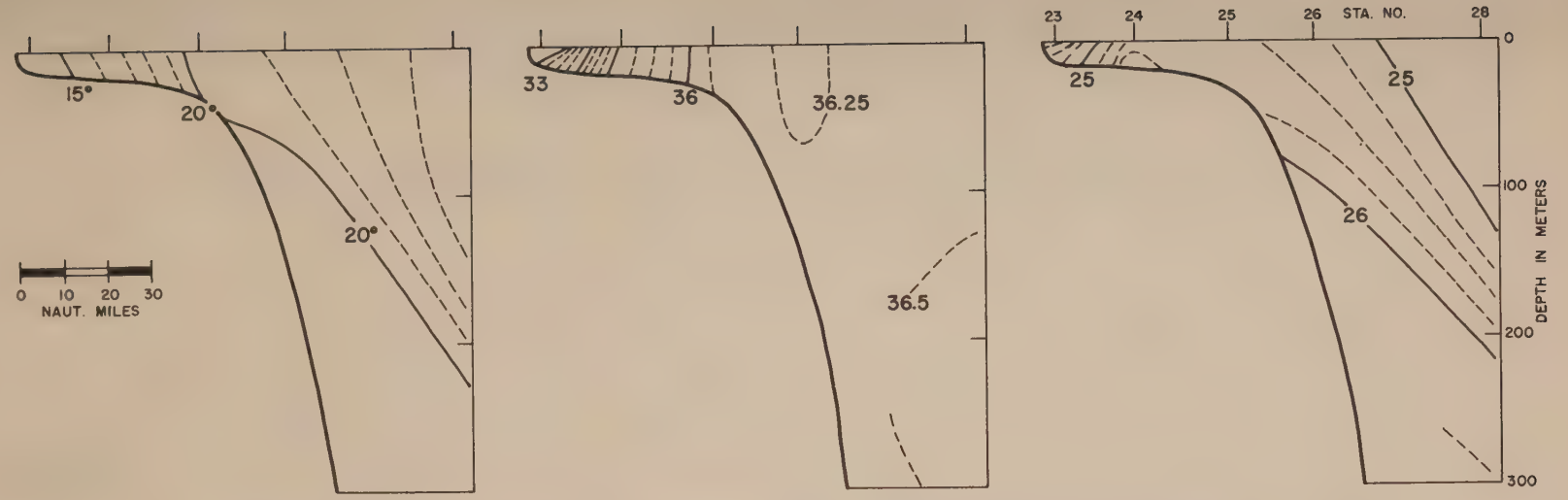

Figure 10.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 23, 24, 25, 26, and 28 (Jacksonville Section).

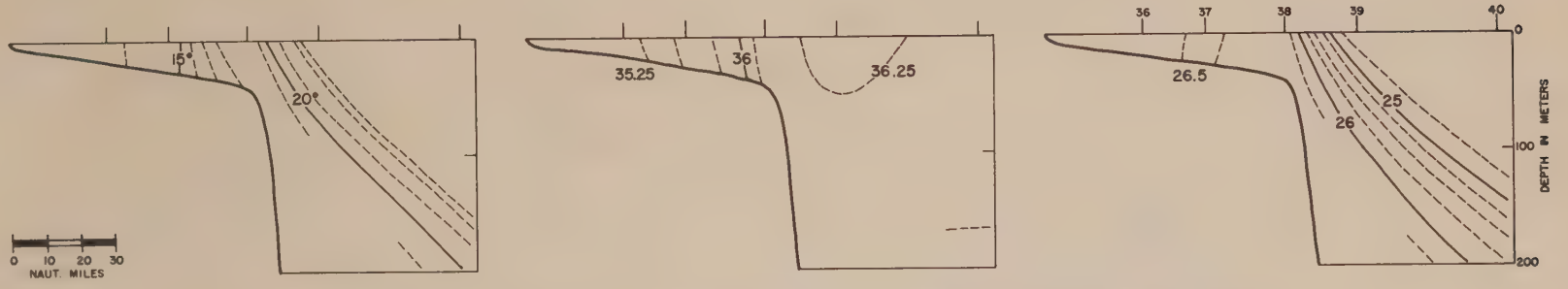

Figure 11.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 36, 37, 38, 39, and 40 (Savannah Section).

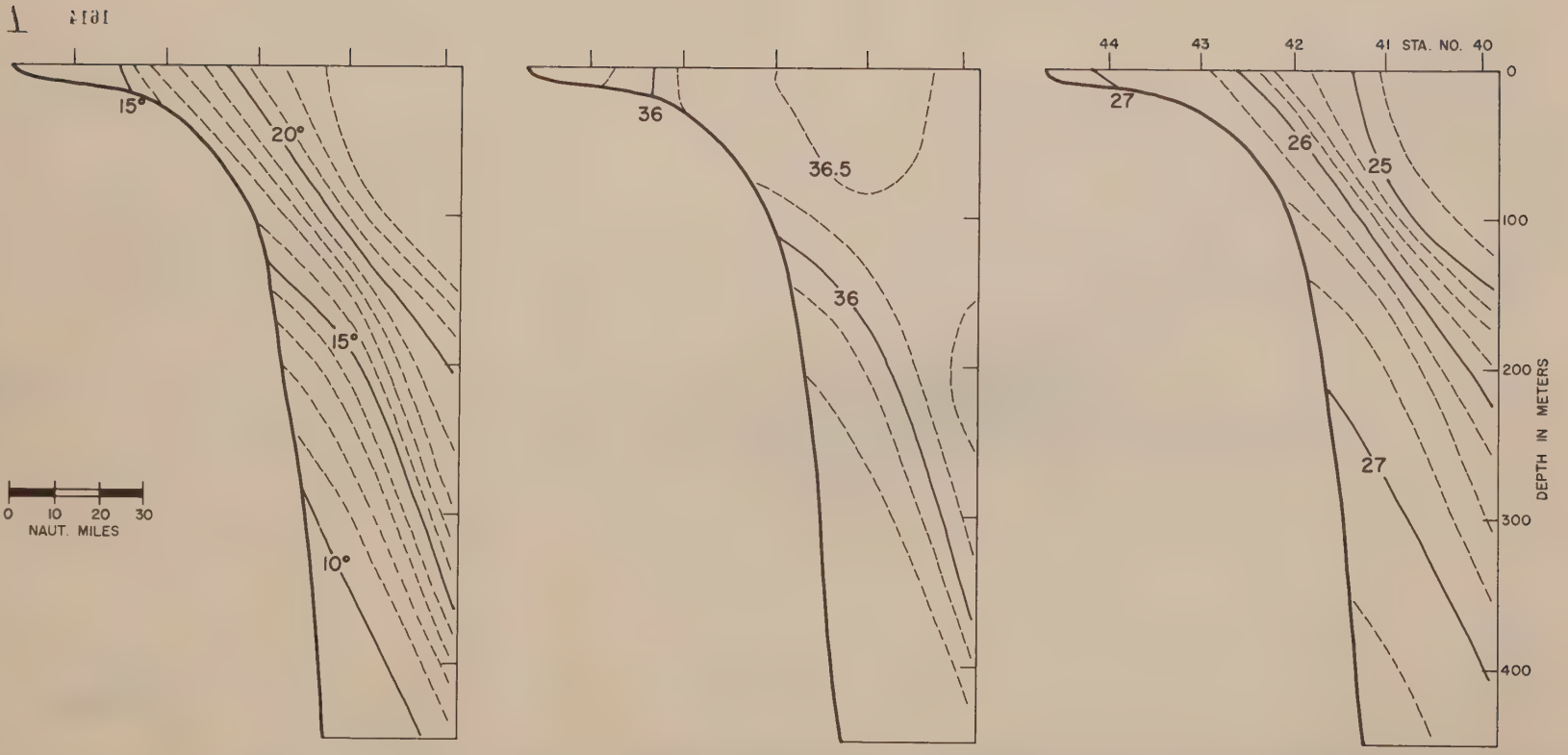

Figure 12.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 40, 41, 42, 43, and 44 (Charleston Section).

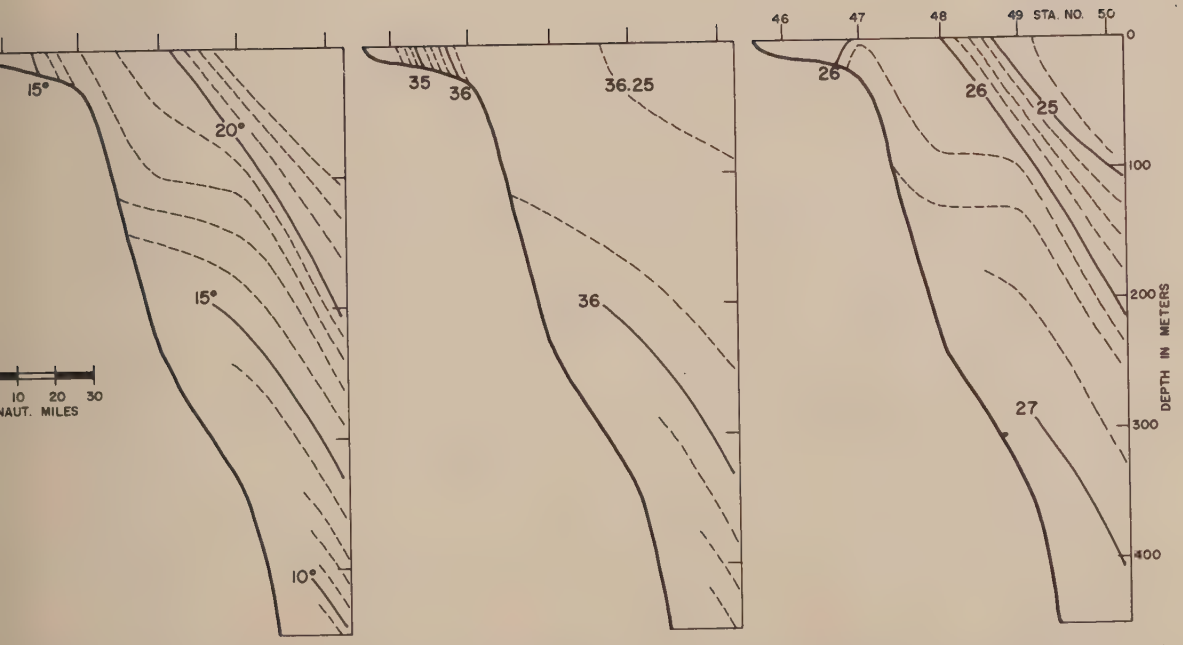

Figure 13.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 46, 47, 48, 49, and 50 (Cape Romain Section).

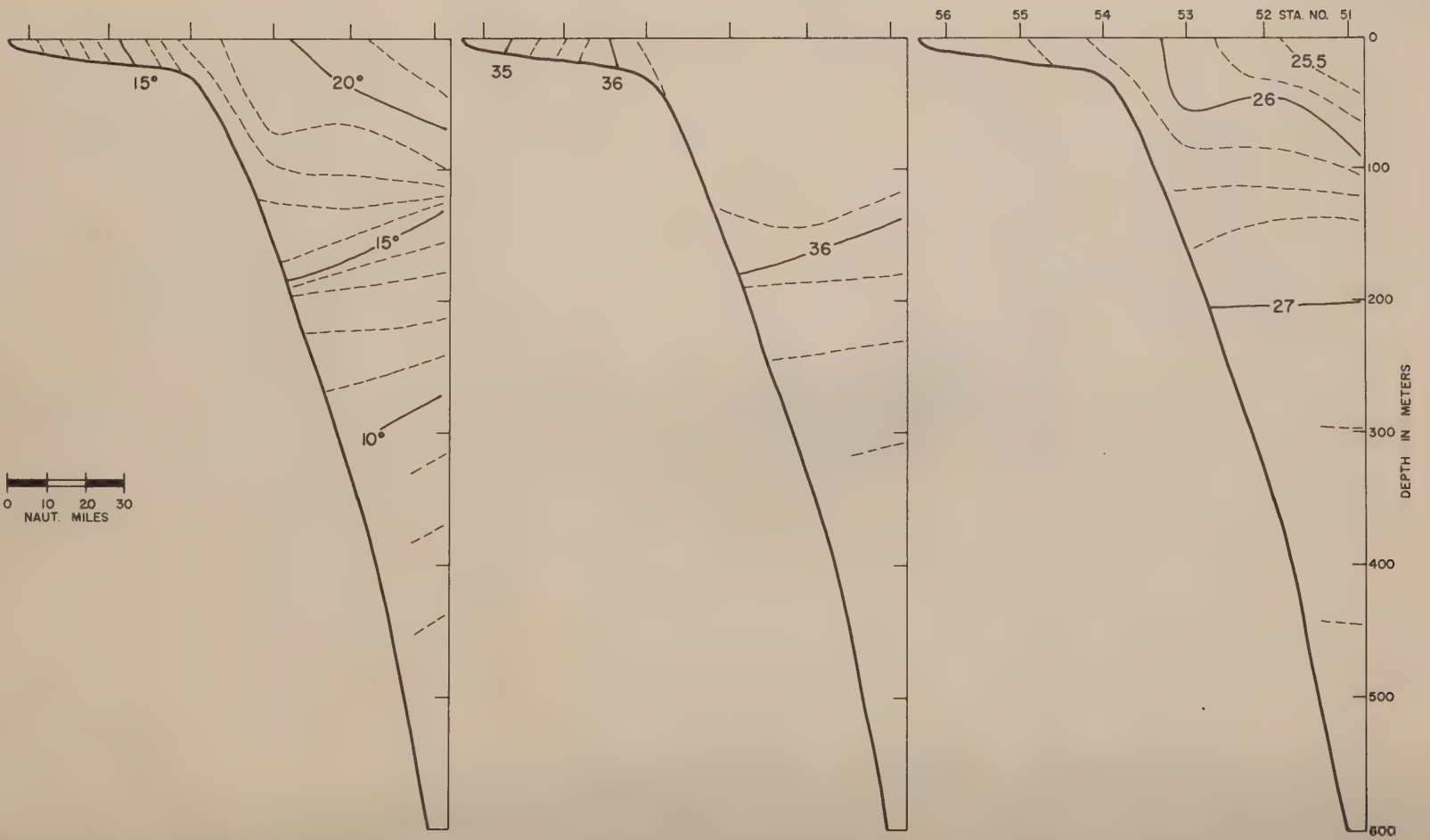

Figure 14.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 51, 52, 53, 54, 55, and 56 (Long Bay Section).

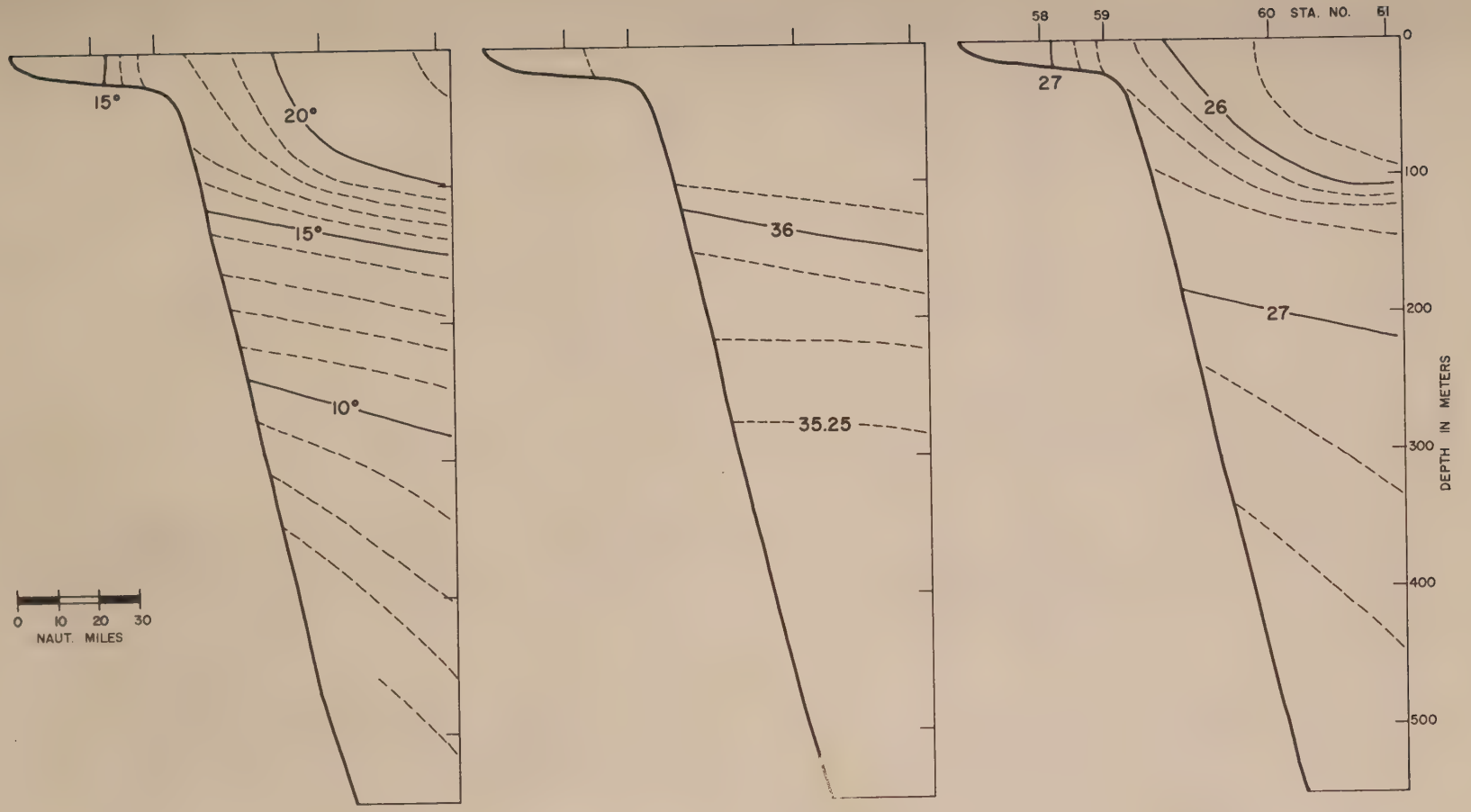

Figure 15.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 58, 59, 60, and 61 (Cape Fear Section).

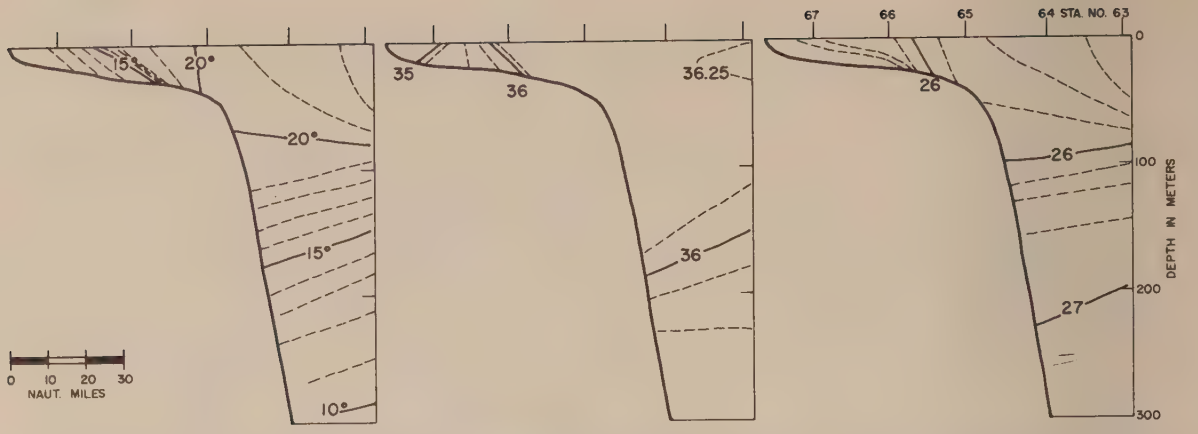

Figure 16.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 63, 64, 65, 66, and 67 (Onslow Bay Section).

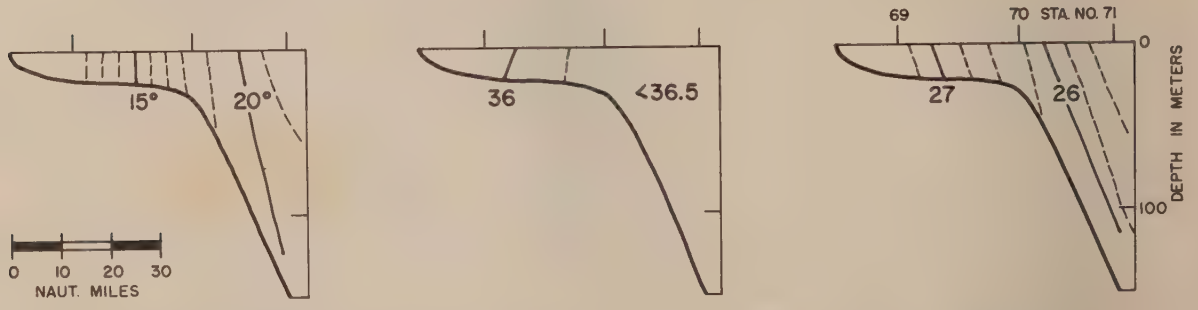

Figure 17.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 69, 70, and 71 (Cape Lookout Section).

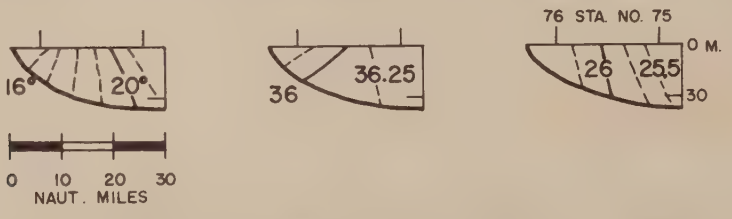

Figure 18.--Distribution of temperature (°C), salinity (‰), and density (σ_t) across section of stations 75 and 76 (Raleigh Bay Section).

STATION 1

DATE Jan. 30, 1954 LAT. 27°00'N. LONG. 79°18'W. TIME 14
DEPTH 576 WIND 5 , 10 BAR. 25 AIR TEMP: dry 21.1°C, wet 17.2°C
HUMIDITY 68% WEATHER 01 CLOUDS: type 8 , amt. 1 SEA: dir. 10 , amt. 2
SWELL: dir. 00 , amt. 0 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	24.88	36.20	24.30	4.86
10	24.91	36.20	24.30	4.79
20	24.83	36.18	24.30	4.79
50	24.80	36.24	24.36	4.73
100	24.16	36.18	24.51	4.83
150	21.64	36.74	25.66	4.68
200	19.47	36.70	26.22	4.54
300	17.94	36.55	26.49	4.73
400	15.12	36.08	26.79	4.01
500	-	35.82	-	3.82

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	24.88	36.20	24.30	4.86
10	24.91	36.20	24.30	4.79
20	24.83	36.18	24.30	4.79
30	24.82	36.21	24.33	4.76
50	24.80	36.24	24.36	4.73
75	24.60	36.21	24.40	4.81
100	24.16	36.18	24.51	4.83
150	21.64	36.74	25.66	4.68
200	19.47	36.70	26.22	4.54
250	18.67	36.63	26.37	4.66
300	17.94	36.55	26.49	4.73
400	15.12	36.08	26.79	4.01
500	-	35.82	-	3.82

STATION 1

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.1	0.1	0.0	-	-
10	1.2	<0.1	0.0	-	0.1
20	1.2	0.0	0.0	-	1.0
50	1.1	0.0	0.0	1.0	-
100	1.0	0.0	0.0	0.1	0.6
150	1.1	0.1	1.0	-	1.4
200	1.3	0.1	0.0	-	1.0
300	1.7	-	4.0	-	-
400	1.5	0.7	6.0	-	0.2
500	2.1	0.9	8.5	-	1.3

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.1	0.1	0.0	-	-
10	1.2	<0.1	0.0	-	0.1
20	1.2	0.0	0.0	-	1.0
30	1.2	0.0	0.0	-	0.9
50	1.1	0.0	0.0	1.0	0.8
75	1.1	0.0	0.0	0.6	0.7
100	1.0	0.0	0.0	0.1	0.6
150	1.1	0.1	1.0	-	1.4
200	1.3	0.1	0.0	-	1.0
250	1.5	0.3	2.0	-	0.8
300	1.7	0.4	4.0	-	0.6
400	1.5	0.7	6.0	-	0.2
500	2.1	0.9	8.5	-	1.3

STATION 2

DATE Jan. 30, 1954 LAT. 27°00' N. LONG. 79°42' W. TIME 18
DEPTH 558 WIND 3 , 09 BAR. 24 AIR TEMP: dry 23.3 °C, wet 18.3 °C
HUMIDITY 62 % WEATHER 03 CLOUDS: type 8 , amt. 2 SEA: dir. 10 , amt. 1
SWELL: dir. 12 , amt. 2 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	24.98	36.18	24.26	4.78
10	24.96	36.19	24.27	4.79
19	24.87	36.23	24.33	4.78
49	24.88	36.24	24.33	4.82
98	24.48	36.38	24.56	4.48
147	20.31	36.61	25.92	3.57
196	16.56	36.26	26.60	3.40*
295	14.07	35.88	26.87	3.40
394	10.29	35.32	27.17	2.90
493	8.07	35.09	27.35	3.15

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	24.98	36.18	24.26	4.78
10	24.96	36.19	24.27	4.79
20	24.87	36.23	24.33	4.78
30	24.87	36.23	24.33	4.82
50	24.88	36.24	24.33	4.82
75	24.61	36.30	24.46	4.71
100	24.30	36.40	24.63	4.43
150	20.03	36.59	25.98	3.57
200	16.48	36.25	26.61	3.50
250	15.36	36.08	26.74	3.45
300	13.84	35.84	26.89	3.36
400	10.11	35.30	27.19	2.92

STATION 2

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.6	0.2	0.0	-	0.6
10	1.7	0.3	0.5	0.7	-
19	1.2	0.2	0.0	-	0.3
49	1.6	0.2	0.0	-	0.3
98	1.2	0.0	0.0	-	1.2
147	1.3	0.5	4.0	-	0.1
196	1.6	0.6	10.0	-	0.5
295	2.3	0.9	2.0*	-	-
394	-	1.6	24.5	-	0.8
493	3.5	1.8	27.0	2.6	0.9

* Value questionable

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.6	0.2	0.0	-	0.6
10	1.7	0.3	0.5	0.7	0.5
20	1.2	0.2	0.0	-	0.3
30	1.3	0.2	0.0	-	0.3
50	1.6	0.2	0.0	-	0.3
75	1.4	0.1	0.0	-	0.8
100	1.2	0.0	0.0	-	1.2
150	1.3	0.5	4.0	-	0.1
200	1.6	0.6	10.0	-	0.5
250	2.0	0.8	14.0	-	0.6
300	2.3	0.9	17.5	-	0.7
400	2.9	1.6	24.5	-	0.8
500	3.5	1.8	27.0	2.6	0.9

STATION 3

DATE Jan. 30, 1954 LAT. 27°00'N. LONG. 80°04'W. TIME 21
DEPTH 12 WIND 4 , 09 BAR. 22 AIR TEMP: dry 22.8°C, wet 18.3°C
HUMIDITY 66 % WEATHER 03 CLOUDS: type 8 , amt. 5 SEA: dir. 10 , amt. 1
SWELL: dir. 12 , amt. 2 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	24.52	36.13	24.36	4.28
8	24.46	36.12	24.37	4.61

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	24.52	36.13	24.36	4.28

STATION 3

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.6	0.1	2.0	0.0	0.3
8	0.9	0.1	0.0	0.0	0.8

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.6	0.1	2.0	0.0	0.3
10	0.9	0.1	0.0	0.0	0.8

STATION 4

DATE Jan. 30, 1954 LAT. 27°20'N. LONG. 80°04'W. TIME 24
DEPTH 24 WIND 3 , 10 BAR. 23 AIR TEMP: dry 22.2°C, wet 18.9°C
HUMIDITY 73% WEATHER 02 CLOUDS: type 8, amt. 5 SEA: dir. 10 , amt. 1
SWELL: dir. 12 , amt. 2 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	24.32	-	-	4.40
10	24.26	-	-	4.41

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	24.32	-	-	4.40
10	24.26	-	-	4.41

STATION 4

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	2.7	0.2	0.0	0.7	0.8
10	2.9	0.1	0.5	-	0.5

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	2.7	0.2	0.0	0.7	0.8
10	2.9	0.1	0.5	-	0.5

STATION 5

DATE Jan. 31, 1954 LAT. 27°40'N. LONG. 80°04'W. TIME 02
DEPTH 37 WIND 3 , 16 BAR. 24 AIR TEMP: dry 21.7°C, wet 18.3°C
HUMIDITY 73% WEATHER 00 CLOUDS: type - , amt. 0 SEA: dir. 10 , amt. 1
SWELL: dir. 12 , amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	24.55	36.34	24.51	4.43
10	24.50	36.32	24.51	3.71
20	24.50	36.31	24.50	4.06
30	22.06	36.29	25.20	4.25

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	24.55	36.34	24.51	4.43
10	24.50	36.32	24.51	3.71
20	24.50	36.31	24.50	4.06
30	22.06	36.29	25.20	4.25

STATION 5

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.7	0.1	0.5	0.1	4.2
10	0.6	0.1	2.0	0.9	0.7
20	0.3	0.3	0.0	-	-
30	1.4	0.3	1.0	-	0.7

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.7	0.1	0.5	0.1	4.2
10	0.6	0.1	2.0	0.9	0.7
20	0.3	0.3	0.0	-	0.7
30	1.4	0.3	1.0	-	0.7

STATION 6

DATE Jan. 31, 1954 LAT. 27°40'N. LONG. 79°41'W. TIME 05
DEPTH 475 WIND 3 , 18 BAR. 23 AIR TEMP: dry 21.7°C, wet 18.3°C
HUMIDITY 73% WEATHER 00 CLOUDS: type -, amt. - SEA: dir. 00, amt. 0
SWELL: dir. 12, amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	24.89	36.22	24.32	4.76
10	24.84	36.22	24.33	4.75
20	24.84	36.22	24.33	4.67
50	24.89	36.20	24.30	4.70
100	23.47	36.29	24.79	4.89
150	20.51	36.56	25.83	3.65
200	17.73	36.47	26.48	4.02
300	14.98	36.07	26.82	3.93
400	11.51	35.52	27.10	2.78

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	24.89	36.22	24.32	4.76
10	24.84	36.22	24.33	4.75
20	24.84	36.22	24.33	4.67
30	24.86	36.21	24.32	4.67
50	24.89	36.20	24.30	4.70
75	24.37	36.22	24.47	4.97
100	23.47	36.29	24.79	4.89
150	20.51	36.56	25.83	3.65
200	17.73	36.47	26.48	4.02
250	16.45	36.29	26.65	4.11
300	14.98	36.07	26.82	3.93
400	11.51	35.52	27.10	2.78

STATION 6

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.0	<0.1	0.0	1.9	1.2
10	0.8	0.0	0.0	-	0.3
20	1.3	0.2	0.0	-	0.3
50	1.7	0.0	0.5	2.8	0.5
100	0.8	<0.1	0.0	-	0.3
150	1.4	0.8	-	-	1.7
200	1.2	0.4	10.0	-	0.2
300	1.9	-	9.5	-	0.5
400	2.8	1.3	17.0	-	0.2

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.0	<0.1	0.0	1.9	1.2
10	0.8	0.0	0.0	-	0.3
20	1.3	0.2	0.0	-	0.3
30	1.4	0.1	<0.5	-	0.4
50	1.7	0.0	0.5	2.8	0.5
75	1.3	<0.1	<0.5	-	0.4
100	0.8	<0.1	0.0	-	0.3
150	1.4	0.8	5.0	-	1.7
200	1.2	0.4	10.0	-	0.2
250	1.6	0.7	10.0	-	0.4
300	1.9	0.9	9.5	-	0.5
400	2.8	1.3	17.0	-	0.2

STATION 7

DATE Feb. 1, 1954 LAT. 27°40'N. LONG. 79°19'W. TIME 02
DEPTH 558 WIND 10 , 35 BAR. 22 AIR TEMP: dry 20.0 °C, wet 16.7 °C
HUMIDITY 72 % WEATHER 00 CLOUDS: type - , amt. - SEA: dir. 36 , amt. 4
SWELL: dir. 00 , amt. 0 VIS. 5 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	24.92	36.24	24.32	4.76
9	24.87	36.22	24.32	4.78
19	24.88	36.25	24.34	4.79
47	24.91	36.25	24.33	4.83
95	24.84	36.28	24.38	4.76
142	22.89	36.67	25.25	-
190	20.48	36.77	26.00	4.56
286	17.93	36.56	26.50	4.68
382	16.19	36.27	26.70	4.15
478	13.44	35.86	26.99	3.77

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	24.92	36.24	24.32	4.76
10	24.87	36.22	24.32	4.78
20	24.88	36.25	24.34	4.79
30	24.90	36.25	24.34	4.81
50	24.90	36.25	24.34	4.83
75	24.87	36.27	24.36	4.79
100	24.65	36.34	24.48	4.74
150	22.44	36.70	25.40	4.61
200	20.18	36.75	26.07	4.60
250	18.79	36.65	26.35	4.71
300	17.74	36.53	26.52	4.59
400	15.75	36.20	26.74	4.07

STATION 7

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.4	0.2	0.0	0.0	2.1
9	1.0	0.2	0.0	-	-
19	1.1	0.1	1.5	0.0	2.0
47	0.8	0.1	0.5	-	0.0
95	1.5	0.5	0.5	0.5	0.2
142	1.0	0.2	1.0	-	0.7
190	1.0	0.2	1.5	-	0.2
286	1.2	0.1	1.5	0.8	0.1
382	1.2	0.6	2.5	0.0	0.9
478	2.4	1.0	12.0	-	0.2

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.4	0.2	0.0	0.0	2.1
10	1.0	0.2	0.0	0.0	2.1
20	1.1	0.1	1.5	0.0	2.0
30	1.0	0.1	1.0	0.1	1.2
50	0.8	0.1	0.5	0.2	0.0
75	1.2	0.3	0.5	0.4	0.1
100	1.5	0.5	0.5	0.5	0.2
150	1.0	0.2	1.0	0.6	0.6
200	1.0	0.2	1.5	0.7	0.2
250	1.2	0.2	1.5	0.8	0.2
300	1.2	0.2	1.5	0.7	0.3
400	1.5	0.7	4.5	0.0	0.8

STATION 8

DATE Feb. 1, 1954 LAT. 28°16'N. LONG. 79°26'W. TIME 11
DEPTH 759 WIND 12 , 01 BAR. 22 AIR TEMP: dry 20.6 °C, wet 17.2 °C
HUMIDITY 72% WEATHER 02 CLOUDS: type 6 , amt. 3 SEA: dir. 36 , amt. 5
SWELL: dir. 36 , amt. 2 VIS. 7 . WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	24.80	36.22	24.34	3.75
10	24.70	36.22	24.37	3.78
19	24.73	36.20	24.35	3.74
48	24.78	36.20	24.34	3.58
97	24.41	36.45	24.64	4.50*
194	18.83	36.65	26.34	3.64
291	17.98	36.55	26.48	3.95
389	16.78	36.39	26.65	3.15
487	13.33	35.79	26.95	2.22
585	10.21	35.30	27.17	2.23
682	7.87	35.01	27.32	2.24

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	24.80	36.22	24.34	3.75
10	24.70	36.22	24.37	3.78
20	24.74	36.20	24.35	3.73
30	24.77	36.20	24.34	3.62
50	24.77	36.21	24.35	3.58
75	24.58	36.35	24.51	3.59
100	24.17	36.46	24.72	3.60
150	20.77	36.60	25.79	3.62
200	18.79	36.65	26.35	3.69
250	18.38	36.60	26.42	3.95
300	17.96	36.55	26.49	3.88
400	16.38	36.32	26.69	3.00
500	12.87	35.71	26.99	2.22
600	9.80	35.24	27.19	2.23

STATION 8

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	2.2	0.3	0.5	-	1.2
10	1.2	0.2	0.5	-	0.4
19	0.5	0.2	0.5	-	-
48	1.0	0.2	0.0	-	0.8
97	0.4	-	0.0	-	1.1
194	1.7	0.1	<0.5	-	2.8
291	2.7	0.5	2.5	-	0.9
389	1.4	0.4	10.0	-	0.6
487	1.5	1.6	13.0	1.9	0.9
585	2.2	2.1	5.0	0.5	0.0
682	3.4	2.3	30.5	0.0	0.2

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	2.2	0.3	0.5	-	1.2
10	1.2	0.2	0.5	-	0.4
20	0.5	0.2	0.5	-	0.5
30	0.7	0.2	0.5	-	0.6
50	1.0	0.2	0.0	-	0.8
75	0.7	0.2	0.0	-	1.0
100	0.4	0.2	0.0	-	1.1
150	1.1	0.1	<0.5	-	2.0
200	1.7	0.1	<0.5	-	2.8
250	2.2	0.3	1.5	-	1.8
300	2.7	0.5	2.5	-	0.9
400	1.4	0.6	10.5	-	0.6
500	1.6	1.7	12.0	1.8	0.8
600	2.4	2.1	9.0	0.4	0.0

STATION 10

DATE Feb. 1, 1954 LAT. 28°19'N. LONG. 80°12 W. TIME 17
DEPTH 31 WIND 6 , 06 BAR. 24 AIR TEMP: dry 22.2°C, wet 17.2°C
HUMIDITY 61% WEATHER 01 CLOUDS: type 8 , amt. 3 SEA: dir. 05 , amt. 4
SWELL: dir. 04 , amt. 4 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	24.06	36.26	24.60	4.78
10	24.03	36.22	24.58	4.79
20	22.91	36.22	24.90	4.95

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	24.06	36.26	24.60	4.78
10	24.03	36.22	24.58	4.79
20	22.91	36.22	24.90	4.95

STATION 10

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	2.7	0.2	0.0	0.0	2.1
10	1.1	0.2	0.0	1.8	0.1
20	1.2	-	0.0	-	0.2

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	2.7	0.2	0.0	0.0	2.1
10	1.1	0.2	0.0	1.8	0.1
20	1.2	-	0.0	-	0.2

STATION 11

DATE Feb. 1, 1954 LAT. 28°20'N. LONG. 80°32'W. TIME 20
DEPTH 13 WIND 4 , 33 BAR. 23 AIR TEMP: dry 21.7 °C, wet 19.4 °C
HUMIDITY 81 % WEATHER 01 CLOUDS: type 8 , amt. 3 SEA: dir. 03 , amt. 2
SWELL: dir. 04 , amt. 3 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	18.00	35.01	25.30	5.44

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	18.00	35.01	25.30	5.44

STATION 11

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.7	-	0.0	0.0	1.9

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.7	-	0.0	0.0	1.9

STATION 12

DATE Feb. 1, 1954 LAT. 28°41'N. LONG. 80°25'W. TIME 23
DEPTH 20 WIND 1 , 04 BAR. 22 AIR TEMP: dry 20.6°C, wet 17.2°C
HUMIDITY 72% WEATHER 02 CLOUDS: type 8 , amt. 2 SEA: dir. 03 , amt. 1
SWELL: dir. 04 , amt. 3 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	17.84	35.03	25.35	4.10
10	17.89	35.03	25.34	4.72

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	17.84	35.03	25.35	4.10
10	17.89	35.03	25.34	4.72

STATION 12

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.7	0.1	0.0	-	0.4
10	1.9	0.4	0.0	-	0.5

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.7	0.1	0.0	-	0.4
10	1.9	0.4	0.0	-	0.5

STATION 13

DATE Feb. 2, 1954 LAT. 29°00'N. LONG. 80°32'W. TIME 02
DEPTH 16 WIND 1 , 32 BAR. 22 AIR TEMP: dry 18.3°C, wet 16.1°C
HUMIDITY 80% WEATHER 00 CLOUDS: type - , amt. - SEA: dir. 00 , amt. 0
SWELL: dir. 04 , amt. 2 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	17.40	35.05	25.48	5.46
10	17.38	35.00	25.44	3.73

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	17.40	35.05	25.48	5.46
10	17.38	35.00	25.44	3.73

STATION 13

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.7	0.5	0.0	-	1.2
10	2.1	0.3	0.0	-	1.1

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.7	0.5	0.0	-	1.2
10	2.1	0.3	0.0	-	1.1

STATION 14

DATE Feb. 2, 1954 LAT. 29°00'N. LONG. 80°10'W. TIME 05
DEPTH 66 WIND 2 , 07 BAR. 22 AIR TEMP: dry 18.3°C, wet 15.6°C
HUMIDITY 76 % WEATHER 00 CLOUDS: type - , amt. - SEA: dir. - , amt. -
SWELL: dir. - , amt. 2 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	22.08	36.18	25.11	3.30
10	22.09	36.18	25.11	3.91
20	21.96	36.17	25.14	4.13
30	21.16	36.18	25.37	4.17
50	21.03	36.27	25.47	4.74

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	22.08	36.18	25.11	3.30
10	22.09	36.18	25.11	3.91
20	21.96	36.17	25.14	4.13
30	21.16	36.18	25.37	4.17
50	21.03	36.27	25.47	4.74

STATION 14

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.2	0.2	0.0	-	0.2
10	0.5	0.1	0.0	2.6	0.5
20	2.0	1.2	0.0	-	1.0
30	1.9	0.4	0.0	2.7	0.2
50	1.7	<0.1	0.5	0.4	0.3

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.2	0.2	0.0	-	0.2
10	0.5	0.1	0.0	2.6	0.5
20	2.0	1.2	0.0	2.7	1.0
30	1.9	0.4	0.0	2.7	0.2
50	1.7	<0.1	0.5	0.4	0.3

STATION 15

DATE Feb. 2, 1954 LAT. 29°00'N. LONG. 79°48'W. TIME 08
DEPTH 681 WIND 2 , 26 BAR. 20 AIR TEMP: dry 20.6°C, wet 16.1°C
HUMIDITY 64% WEATHER 00 CLOUDS: type - , amt. - SEA: dir. - , amt. -
SWELL: dir. 11 , amt. 1 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	24.89	36.10	24.23	4.66
10	24.87	36.11	24.24	4.59
20	24.86	36.15	24.27	4.61
50	24.82	36.27	24.38	4.65
100	24.26	36.53	24.74	4.04
150	21.05	36.70	25.79	3.49
200	18.70	36.64	26.37	4.38
300	16.72	36.36	26.64	4.07
400	13.52	35.82	26.94	3.39
600	6.36	34.94	27.48	3.30

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	24.89	36.10	24.23	4.66
10	24.87	36.11	24.24	4.59
20	24.86	36.15	24.27	4.61
30	24.84	36.19	24.31	4.66
50	24.82	36.27	24.38	4.65
75	24.54	36.41	24.57	4.34
100	24.26	36.53	24.74	4.04
150	21.05	36.70	25.79	3.49
200	18.70	36.64	26.37	4.38
250	17.86	36.53	26.50	4.27
300	16.72	36.36	26.64	4.07
400	13.52	35.82	26.94	3.39
500	10.07	35.35	27.23	3.13
600	6.36	34.94	27.48	3.30

STATION 15

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.4	0.0	<0.5	0.4	0.6
10	-	0.4	2.5	0.9	0.6
20	0.4	0.1	0.0	0.0	0.2
50	0.7	0.3	0.5	-	0.6
100	-	0.4	1.0	2.2	1.2
150	1.3	-	2.0	-	-
200	0.5	0.3	1.5	-	0.2
300	1.6	1.1	8.5	0.3	0.4
400	1.5	0.1*	11.5	-	0.7
600	-	2.5	18.0	-	0.3

Value questionable

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.4	0.0	<0.5	0.4	0.6
10	0.4	0.4	2.5	0.9	0.6
20	0.4	0.1	0.0	0.0	0.2
30	0.5	0.2	<0.5	0.3	0.3
50	0.7	0.3	0.5	0.9	0.6
75	0.9	0.4	1.0	1.6	0.9
100	1.0	0.4	1.0	2.2	1.2
150	1.3	0.4	2.0	-	0.7
200	0.5	0.3	1.5	-	0.2
250	1.1	0.7	5.0	-	0.3
300	1.6	1.1	8.5	0.3	0.4
400	1.5	1.2	11.5	-	0.7
500	-	1.9	15.0	-	0.5
600	-	2.5	18.0	-	0.3

STATION 16

DATE Feb. 2, 1954 LAT. 29°00'N. LONG. 79°26'W. TIME 12
DEPTH 768 WIND 8 , 35 BAR. 19 AIR TEMP: dry 18.9°C, wet 17.2°C
HUMIDITY 85% WEATHER 63 CLOUDS: type 7 , amt. 9 SEA: dir. 35 , amt. 2
SWELL: dir. 00 , amt. 0 VIS. 6 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	23.56	36.40	24.85	4.76
10	23.51	36.40	24.87	4.73
19	23.48	36.40	24.87	4.75
49	22.98	36.55	25.13	3.07
98	22.66	36.55	25.23	3.80
148	22.27	36.65	25.41	2.65
197	20.02	36.75	26.11	3.09
296	18.29	36.60	26.44	3.47
395	17.60	36.49	26.53	3.88
594	13.58	35.88	26.97	3.32
693	7.86	36.42*	28.43	2.39

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	23.56	36.40	24.85	4.76
10	23.51	36.40	24.87	4.73
20	23.46	36.41	24.89	4.67
30	23.27	36.47	24.99	3.95
50	22.97	36.55	25.14	3.10
75	22.82	36.55	25.18	3.69
100	22.64	36.56	25.24	3.72
150	22.16	36.66	25.45	2.67
200	19.95	36.74	26.12	3.10
250	18.96	36.66	26.32	3.29
300	18.20	36.59	26.46	3.50
400	17.45	36.48	26.56	3.89
500	16.10	36.23	26.69	3.80
600	13.30	-	-	3.28

STATION 16

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	-	0.6	0.5	-	2.3
10	0.4	0.0	0.5	-	-
19	0.7	0.7	0.0	-	0.5
49	0.5	0.0	0.0	3.9	0.2
98	0.6	-	0.5	6.2	1.8
148	1.1	<0.1	0.5	1.0	0.1
197	0.5	-	0.5	1.4	-
296	1.3	0.6	2.0	-	0.8
395	1.2	0.1*	4.5	4.2	-
594	1.7	1.1	11.5	-	2.1
693	3.9	-	14.0	-	1.0

* Value questionable

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	-	0.6	0.5	-	2.3
10	0.4	0.0	0.5	-	1.4
20	0.7	0.7	0.0	-	0.5
30	0.6	0.5	0.0	-	0.4
50	0.5	0.0	0.0	3.9	0.2
75	0.6	0.0	<0.5	5.1	1.0
100	0.6	<0.1	0.5	6.2	1.8
150	1.1	<0.1	0.5	1.0	0.1
200	0.5	0.2	0.5	1.4	0.3
250	0.9	0.4	1.5	2.1	0.6
300	1.3	0.6	2.0	2.8	0.8
400	1.2	0.8	4.5	4.2	1.2
500	1.5	1.0	8.0	-	1.7
600	1.7	1.1	11.5	-	2.1
700	3.9	-	14.0	-	1.0

STATION 17

DATE Feb. 5, 1954 LAT. 29°40'N. LONG. 79°36'W. TIME 02
DEPTH 777 WIND 10 , 27 BAR. 10 AIR TEMP: dry 17.8 °C, wet 12.8 °C
HUMIDITY 57 % WEATHER 02 CLOUDS: type - , amt. 0 SEA: dir. 27 , amt. 5
SWELL: dir. 00 , amt. 0 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	23.78	36.42	24.80	4.58
9	23.76	36.44	24.82	4.59
19	23.74	36.42	24.81	4.57
47	23.34	36.59	25.06	4.52
94	22.68	36.54	25.21	4.72
141	22.23	36.53	25.33	4.76
189	20.39	36.74	26.00	4.17
284	18.35	36.71	26.51	-
380	17.30*	36.40	26.53	3.85
476	15.25	36.13	26.80	3.66
668	10.00	35.34	27.24	3.26

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	23.78	36.42	24.80	4.58
10	23.76	36.44	24.82	4.59
20	23.73	36.43	24.82	4.57
30	23.58	36.50	24.92	4.54
50	23.29	36.59	25.07	4.54
75	22.92	36.56	25.16	4.66
100	22.63	36.53	25.22	4.76
150	21.84	36.58	25.48	4.63
200	20.10	36.74	26.08	4.15
250	18.97	36.73	26.37	4.08
300	18.07	36.68	26.56	3.99
400	16.40	36.33	26.69	3.81
500	14.68	36.05	26.87	3.61
600	12.03	35.66	27.11	3.40

STATION 17

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	2.0	0.4	0.0	0.0	1.0
9	0.8	0.1	1.0	8.0	0.8
19	1.9	<0.1	0.5	-	0.9
47	-	0.4	<0.5	0.0	1.7
94	1.3	0.2	0.0	0.0	0.3
141	1.9	0.6	0.5	-	0.2
189	1.7	0.2	1.5	-	0.5
284	1.9	0.7	-	-	0.2
380	1.1	0.9	3.5	1.7	0.2
476	-	1.8	11.0	-	0.3
668	-	1.8	17.5	-	0.3

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	2.0	0.4	0.0	0.0	1.0
10	0.8	0.1	1.0	8.0	0.8
20	1.9	<0.1	0.5	-	0.9
30	1.8	0.2	<0.5	-	1.2
50	1.7	0.4	<0.5	0.0	1.6
75	1.5	0.3	<0.5	0.0	0.8
100	1.4	0.2	0.0	0.0	0.3
150	1.9	0.5	0.5	-	0.3
200	1.7	0.3	1.5	-	0.5
250	1.9	0.5	2.0	-	0.3
300	1.8	0.7	2.5	-	0.2
400	1.1	1.1	5.0	1.7	0.2
500	-	1.8	12.0	-	0.3
600	-	1.8	15.0	-	0.3

STATION 18

DATE Feb. 4, 1954 LAT. 29°40'N. LONG. 80°00'W. TIME 22
DEPTH 530 WIND 8 , 28 BAR. 09 AIR TEMP: dry 16.1°C, wet 13.3°C
HUMIDITY 73% WEATHER 02 CLOUDS: type 8 , amt. 1 SEA: dir. 28 , amt. 2
SWELL: dir. 34 , amt. 3 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	24.76	36.17	24.32	4.58
9	24.74	36.15	24.31	4.53
18	24.72	36.15	24.32	4.65
46	24.81	36.17	24.30	4.56
91	24.42	36.40	24.60	4.32
137	23.48	36.60	25.03	4.03
184	18.63	36.36	26.17	3.27
277	12.16	35.83	27.22	3.00
371	9.00	35.19	27.29	2.91
466	7.29	35.01	27.41	3.18

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	24.76	36.17	24.32	4.58
10	24.74	36.15	24.31	4.55
20	24.73	36.15	24.31	4.65
30	24.79	36.15	24.29	4.62
50	24.80	36.19	24.32	4.54
75	24.62	36.32	24.47	4.41
100	24.28	36.47	24.69	4.30
150	22.03	36.54	25.40	3.78
200	17.28	36.28	26.45	3.21
250	13.70	35.99	27.03	3.06
300	11.25	35.63	27.24	2.95
400	8.32	35.12	27.34	2.95

STATION 18

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.0	0.4	0.0	-	-
9	1.0	0.6	0.5	0.2	0.4
18	0.6	0.4	0.0	1.4	0.8
46	1.0	0.5	<0.5	1.6	-
91	-	0.7	1.0	-	-
137	1.4	0.4	1.0	4.1	0.0
184	1.3	1.0	5.5	0.0	0.3
277	1.5	1.5	0.5*	-	0.1
371	2.2	2.0	33.0	-	0.9
466	2.4	2.2	19.0	1.3	0.2

* Value questionable

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.0	0.4	0.0	-	-
10	1.0	0.6	0.5	0.2	0.4
20	0.7	0.4	0.0	1.4	0.8
30	0.8	0.5	<0.5	1.5	-
50	1.0	0.6	0.5	1.7	-
75	1.2	0.7	1.0	2.4	-
100	1.3	0.7	1.0	3.1	-
150	1.4	0.6	2.5	3.0	0.1
200	1.4	1.1	8.0	-	0.3
250	1.5	1.4	15.0	-	0.2
300	1.7	1.6	23.0	-	0.3
400	2.2	2.1	29.0	1.3	0.7

STATION 19

DATE Feb. 4, 1954 LAT. 29°40'N. LONG. 80°23'W. TIME 20
DEPTH 37 WIND 7 , 32 BAR. 10 AIR TEMP: dry 12.8 °C, wet 10.6 °C
HUMIDITY 77% WEATHER 03 CLOUDS: type 8 , amt. 1 SEA: dir. 32 , amt. 2
SWELL: dir. 35 , amt. 3 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	21.07	36.25	25.44	4.06
10	21.12	36.26	25.44	4.11
20	20.93	36.26	25.49	4.02
30	20.82	36.26	25.52	4.09

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	21.07	36.25	25.44	4.06
10	21.12	36.26	25.44	4.11
20	20.93	36.26	25.49	4.02
30	20.82	36.26	25.52	4.09

STATION 19

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.2	0.1	2.0	-	0.3
10	1.3	-	0.5	0.0	0.3
20	1.4	0.7	2.5	-	1.6
30	1.9	0.7	2.5	0.0	0.7

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.2	0.1	2.0	-	0.3
10	1.3	0.4	0.5	0.0	0.3
20	1.4	0.7	2.5	0.0	1.6
30	1.9	0.7	2.5	0.0	0.7

STATION 20

DATE Feb. 4, 1954 LAT. 29°40'N. LONG. 80°45'W. TIME 17
DEPTH 26 WIND 6 , 30 BAR. 11 AIR TEMP: dry 10.6°C, wet 8.9°C
HUMIDITY 81% WEATHER 00 CLOUDS: type - , amt. 0 SEA: dir. 30 , amt. 2
SWELL: dir. 34 , amt. 3 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	17.70	35.40	25.67	4.45
10	17.66	35.40	25.68	4.46
20	17.93	35.56	25.74	4.96

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	17.70	35.40	25.67	4.45
10	17.66	35.40	25.68	4.46
20	17.93	35.56	25.74	4.96

STATION 20

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.4	0.7	0.0	-	0.7
10	1.3	<0.1	0.0	0.0	0.6
20	-	0.6	0.0	1.1	0.5

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.4	0.7	0.0	-	0.7
10	1.3	<0.1	0.0	0.0	0.6
20	-	0.6	0.0	1.1	0.5

STATION 21

DATE Feb. 4, 1954 LAT. 29°41'N. LONG. 81°08'W. TIME 15
DEPTH 16 WIND 6 ,30 BAR. 12 AIR TEMP: dry 10.6°C, wet 7.8°C
HUMIDITY 69% WEATHER 00 CLOUDS: type - ,amt. 0 SEA: dir. 31 ,amt. 2
SWELL: dir. 36 ,amt. 3 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	15.22	33.26	24.60	5.03
10	15.37	33.38	24.66	4.18

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	15.22	33.26	24.60	5.03
10	15.37	33.38	24.66	4.18

STATION 21

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	2.1	0.1	0.5	1.6	0.9
10	1.4	0.4	0.0	-	1.5

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	2.1	0.1	0.5	1.6	0.9
10	1.4	0.4	0.0	-	1.5

STATION 22

DATE Feb. 4, 1954 LAT. 30°00'N. LONG. 81°14'W. TIME 12
DEPTH 14 WIND 7 , 30 BAR. 11 AIR TEMP: dry 8.3 °C, wet 6.7 °C
HUMIDITY 80 % WEATHER 00 CLOUDS: type - , amt. 0 SEA: dir. 30 , amt. 2
SWELL: dir. 35 , amt. 3 VIS. 6 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	15.12	33.70	24.96	5.54
10	15.10	33.68	24.95	4.43

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	15.12	33.70	24.96	5.54
10	15.10	33.68	24.95	4.43

STATION 22

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.9	0.2	0.0	18.2	0.6
10	2.2	0.2	-	1.1	1.1

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.9	0.2	0.0	18.2	0.6
10	2.2	0.2	-	1.1	1.1

STATION 23

DATE Feb. 5, 1954 LAT. 30°20' N. LONG. 81°20' W. TIME 24
DEPTH 15 WIND 2 , 13 BAR. 12 AIR TEMP: dry 13.9 °C, wet 11.7 °C
HUMIDITY 78 % WEATHER 00 CLOUDS: type - , amt. 0 SEA: dir. 00 , amt. 0
SWELL: dir. 00 , amt. 0 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	14.39	32.43	24.14	4.80
10	14.01	33.03	24.68	4.80

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	14.39	32.43	24.14	4.80
10	14.01	33.03	24.68	4.80

STATION 23

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	2.1	0.4	2.5	22.6	1.0
10	1.6	0.2	1.0	1.4	0.7

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	2.1	0.4	2.5	22.6	1.0
10	1.6	0.2	1.0	1.4	0.7

STATION 24

DATE Feb. 5, 1954 LAT. 30°20' N. LONG. 80°59'W. TIME 22
DEPTH 22 WIND 2 , 09 BAR. 12 AIR TEMP: dry 16.1°C, wet 12.2°C
HUMIDITY 63% WEATHER 02 CLOUDS: type 4 , amt. 1 SEA: dir. 00 , amt. 0
SWELL: dir. 35 , amt. 2 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	16.50	35.04	25.68	5.02
10	16.13	35.17	25.87	4.63

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	16.50	35.04	25.68	5.02
10	16.13	35.17	25.87	4.63

STATION 24

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.2	0.2	1.0	-	1.6
10	2.1	0.5	1.0	0.0	0.6

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.2	0.2	1.0	-	1.6
10	2.1	0.5	1.0	0.0	0.6

STATION 25

DATE Feb. 5, 1954 LAT. 30°20' N. LONG. 80°34'W. TIME 19
DEPTH 33 WIND 5 , 31 BAR. 12 AIR TEMP: dry 15.0°C, wet 11.1°C
HUMIDITY 62% WEATHER 02 CLOUDS: type - , amt. 0 SEA: dir. 32 , amt. 2
SWELL: dir. 33 , amt. 3 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	20.47	36.31	25.65	4.99
10	20.41	36.31	25.67	5.01
20	20.34	36.32	25.70	4.69

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	20.47	36.31	25.65	4.99
10	20.41	36.31	25.67	5.01
20	20.34	36.32	25.70	4.69

STATION 25

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	2.2	0.4	0.0	-	1.0
10	1.9	0.2	0.5	0.0	0.1
20	1.5	<0.1	0.0	-	0.8

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	2.2	0.4	0.0	-	1.0
10	1.9	0.2	0.5	0.0	0.1
20	1.5	<0.1	0.0	-	0.8

STATION 26

DATE Feb. 5, 1954 LAT. 30°20' N. LONG. 80°12'W. TIME 16
DEPTH 155 WIND 9 , 31 BAR. 14 AIR TEMP: dry 15.0°C, wet 12.2°C
HUMIDITY 73% WEATHER 02 CLOUDS: type -, amt. 0 SEA: dir. 32, amt. 5
SWELL: dir. 00, amt. 0 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	21.36	36.23	25.35	4.80
10	21.34	36.24	25.36	4.80
20	21.16	36.23	25.40	4.78
50	20.09	36.16	25.64	4.32
75	19.93	36.29	25.78	4.05
100	19.09	36.33	26.03	3.73

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	21.36	36.23	25.35	4.80
10	21.34	36.24	25.36	4.80
20	21.16	36.23	25.40	4.78
30	20.70	36.18	25.49	4.88
50	20.09	36.16	25.64	4.32
75	19.93	36.29	25.78	4.05
100	19.09	36.33	26.03	3.73

STATION 26

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	2.0	<0.1	1.0	1.6	-
10	1.4	0.2	1.5	0.2	0.0
20	2.4	0.7	1.0	2.1	0.4
50	2.0	0.4	0.5	-	0.1
75	1.2	0.4	5.0	2.3	0.5
100	2.3	0.4	1.0	0.0	1.2

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	2.0	<0.1	1.0	1.6	-
10	1.4	0.2	1.5	0.2	0.0
20	2.4	0.7	1.0	2.1	0.4
30	2.3	0.6	1.0	2.1	0.3
50	2.0	0.4	0.5	2.2	0.1
75	1.2	0.4	5.0	2.3	0.5
100	2.3	0.4	1.0	0.0	1.2

STATION 28

DATE Feb. 5, 1954 LAT. 30°19' N. LONG. 79°27' W. TIME 08
DEPTH 777 WIND 13 , 30 BAR. 10 AIR TEMP: dry 16.1°C, wet 12.2°C
HUMIDITY 63% WEATHER 00 CLOUDS: type - , amt. 0 SEA: dir. 28 , amt. 5
SWELL: dir. 00 , amt. 0 VIS. 6 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	23.49	36.39	24.86	4.35
10	23.46	36.38	24.87	3.98
20	23.44	36.36	24.86	4.21
50	23.49	36.38	24.86	3.99
100	23.35	36.40	24.91	4.31
150	22.64	36.58	25.25	4.34
200	20.31	36.65	25.95	4.41
300	19.06	36.62	26.26	3.76
400	-	36.38	-	3.83

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	23.49	36.39	24.86	4.35
10	23.46	36.38	24.87	3.98
20	23.44	36.36	24.86	4.21
30	23.47	36.37	24.85	4.10
50	23.49	36.38	24.86	3.99
75	23.41	36.39	24.89	4.19
100	23.35	36.40	24.91	4.31
150	22.64	36.58	25.25	4.34
200	20.31	36.65	25.95	4.41
250	19.60	36.64	26.14	4.00
300	19.06	36.62	26.26	3.76
400	-	36.38	-	3.83

STATION 28

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.3	0.4	0.0	-	0.0
10	2.1	0.3	0.5	2.2	0.0
20	1.6	0.2	<0.5	0.1	0.7
50	1.2	0.4	1.5	0.1	0.5
100	1.4	0.3	0.0	1.6	1.3
150	1.9	0.0	0.5	0.0	0.3
200	2.3	0.6	0.5	2.1	0.1
300	2.6	0.1	2.5	2.6	<0.1
400	1.5	0.5	0.0	-	0.4

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.3	0.4	0.0	-	0.0
10	2.1	0.3	0.5	2.2	0.0
20	1.6	0.2	<0.5	0.1	0.7
30	1.5	0.3	0.5	0.1	0.6
50	1.2	0.4	1.5	0.1	0.5
75	1.3	0.4	1.0	0.9	0.9
100	1.4	0.3	0.0	1.6	1.3
150	1.9	0.0	0.5	0.0	0.3
200	2.3	0.6	0.5	2.1	0.1
250	2.5	0.4	1.5	2.4	<0.1
300	2.6	0.1	2.5	2.6	<0.1
400	1.5	0.5	0.0	-	0.4

STATION 33

DATE Feb. 10, 1954 LAT. 31°00' N. LONG. 80°46' W. TIME 12
DEPTH 22 WIND 10, 25 BAR. 12 AIR TEMP: dry 14.4°C, wet 13.9°C
HUMIDITY 95% WEATHER 02 CLOUDS: type 8, amt. 1 SEA: dir. 26, amt. 3
SWELL: dir. 00, amt. 0 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	15.48	35.62	26.36	5.50
10	15.50**	35.59	26.33	5.56

** From BT

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	15.48	35.62	26.36	5.50
10	15.50	35.59	26.33	5.56

STATION 33

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.7	0.6	1.5	0.0	0.2
10	2.7	2.1	<0.5	0.8	0.8

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.7	0.6	1.5	0.0	0.2
10	2.7	2.1	<0.5	0.8	0.8

STATION 34

DATE Feb. 10, 1954 LAT. 31°00' N. LONG. 81°09' W. TIME 15
DEPTH 15 WIND 7 , 22 BAR. 13 AIR TEMP: dry 13.3°C, wet 12.8°C
HUMIDITY 95 % WEATHER 02 CLOUDS: type - , amt. 0 SEA: dir. 22 , amt. 3
SWELL: dir. 00 , amt. 0 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	13.09	32.84	24.72	5.81
10	13.01	32.81	24.72	5.90

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	13.09	32.84	24.72	5.81
10	13.01	32.81	24.72	5.90

STATION 34

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	2.8	0.0	0.0	-	0.8
10	3.8	0.4	0.0	-	0.9

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	2.8	0.0	0.0	-	0.8
10	3.8	0.4	0.0	-	0.9

STATION 35

DATE Feb. 10, 1954 LAT. 31°20' N. LONG. 80°54' W. TIME 18
DEPTH 16 WIND 6 , 18 BAR. 11 AIR TEMP: dry 16.1°C, wet 15.0°C
HUMIDITY 89 % WEATHER 03 CLOUDS: type 5 , amt. 2 SEA: dir. 20 , amt. 2
SWELL: dir. 00 , amt. 0 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	12.76	32.18	24.28	6.13
10	13.15	33.57	25.28	5.91

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	12.76	32.18	24.28	6.13
10	13.15	33.57	24.28	5.91

STATION 35

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	3.8	0.3	0.0	0.9	0.9
10	3.3	0.2	0.5	-	0.6

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	3.8	0.3	0.0	0.9	0.9
10	3.3	0.2	0.5	-	0.6

STATION 36

DATE Feb. 10, 1954 LAT. 31°40' N. LONG. 80°37' W. TIME 21
DEPTH 16 WIND 7 , 18 BAR. 10 AIR TEMP: dry 16.1°C, wet 14.4°C
HUMIDITY 83 % WEATHER 03 CLOUDS: type 3 , amt. 6 SEA: dir. 20 , amt. 2
SWELL: dir. 21 , amt. 3 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	13.81	35.11	26.33	5.02
10	13.78	35.14	26.36	5.05

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	13.81	35.11	26.33	5.02
10	13.78	35.14	26.36	5.05

STATION 36

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.5	0.1	0.0	2.0	0.4
10	2.1	1.3	0.5	-	0.6

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.5	0.1	0.0	2.0	0.4
10	2.1	1.3	0.5	-	0.6

STATION 37

DATE Feb. 10, 1954 LAT. 31°38'N. LONG. 80°18'W. TIME 24
DEPTH 29 WIND 7 , 22 BAR. 10 AIR TEMP: dry 16.7 °C, wet 15.0°C
HUMIDITY 84 % WEATHER 03 CLOUDS: type 5 , amt. 8 SEA: dir. 20 , amt. 2
SWELL: dir. 20 , amt. 3 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	14.40	35.59	26.58	4.29
10	14.38	35.57	26.56	5.13
20	14.35	35.55	26.56	5.39

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	14.40	35.59	26.58	4.29
10	14.38	35.57	26.56	5.13
20	14.35	35.55	26.56	5.39

STATION 37

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	4.0	2.5	0.0	0.0	1.2
10	1.9	1.5	<0.5	2.6	0.4
20	1.6	1.3	1.5	0.0	0.2

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	4.0	2.5	0.0	0.0	1.2
10	1.9	1.5	<0.5	2.6	0.4
20	1.6	1.3	1.5	0.0	0.2

STATION 38

DATE Feb. 11, 1954 LAT. 31°36' N. LONG. 79°51' W. TIME 02
DEPTH 42 WIND 8 , 25 BAR. 11 AIR TEMP: dry 18.3 °C, wet 17.2°C
HUMIDITY 90% WEATHER 01 CLOUDS: type 5 , amt. 3 SEA: dir. 26 , amt. 3
SWELL: dir. 00 , amt. 0 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	18.05	36.38	26.33	4.66
10	18.02	36.39	26.35	4.40
20	18.01	36.39	26.35	3.94
30	18.02	36.36	26.33	4.68

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	18.05	36.38	26.33	4.66
10	18.02	36.39	26.35	4.40
20	18.01	36.39	26.35	3.94
30	18.02	36.36	26.33	4.68

STATION 38

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	2.0	0.8	0.5	0.3	0.3
10	1.7	1.6	0.0	0.0	0.4
20	1.3	1.4	0.5	4.0	1.0
30	1.9	-	0.5	0.0	0.3

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	2.0	0.8	0.5	0.3	0.3
10	1.7	1.6	0.0	0.0	0.4
20	1.3	1.4	0.5	4.0	1.0
30	1.9	-	0.5	0.0	0.3

STATION 39

DATE Feb. 11, 1954 LAT. 31°32' N. LONG. 79°28' W. TIME 05
DEPTH 484 WIND 10 , 20 BAR. 11 AIR TEMP: dry 20.0 °C, wet 16.7 °C
HUMIDITY 72 % WEATHER 02 CLOUDS: type 5 , amt. - SEA: dir. 20 , amt. 4
SWELL: dir. 00 , amt. 0 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	23.38	36.12	24.69	4.72
8	23.34	36.14	24.72	4.71
17	23.26	36.14	24.74	4.69
40	21.84	36.22	25.21	4.71
81	19.67	36.31	25.87	4.65

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	23.38	36.12	24.69	4.72
10	23.34	36.14	24.72	4.70
20	23.07	36.15	24.80	4.69
30	22.44	36.19	25.02	4.71
50	21.27	36.25	25.39	4.71
75	19.96	36.30	25.78	4.67

STATION 39

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	2.2	0.2	0.0	-	0.4
8	2.6	1.1	0.0	-	0.5
17	1.7	1.2	1.0	-	-
40	2.1	0.0	0.0	-	0.0
81	2.3	0.0	1.0	-	0.6

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	2.2	0.2	0.0	-	0.4
10	2.4	1.2	<0.5	-	0.5
20	1.8	1.1	1.0	-	0.3
30	2.0	0.6	0.5	-	0.2
50	2.1	0.0	<0.5	-	0.1
75	2.3	0.0	1.0	-	0.5

STATION 40

DATE Feb. 15, 1954 LAT. 31°28' N. LONG. 78°40' W. TIME 06
DEPTH 528 WIND 7 , 12 BAR. 28 AIR TEMP: dry 19.4 °C, wet 15.6 °C
HUMIDITY 67 % WEATHER 02 CLOUDS: type 8 , amt. 3 SEA: dir. 15 , amt. 2
SWELL: dir. 14 , amt. 3 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	23.97	36.36	24.70	4.77
9	23.90	36.31	24.68	4.75
18	23.88	36.28	24.67	4.78
45	23.94	36.31	24.67	4.73
89	23.94	36.26	24.63	4.70
134	23.50	36.43	24.89	4.54
178	20.54	36.34	25.66	4.62
266	18.42	36.53	26.36	3.43
352	14.83	-	-	3.07
429	10.94	35.38	27.10	2.97

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	23.97	36.36	24.70	4.77
10	23.90	36.31	24.68	4.75
20	23.89	36.28	24.66	4.78
30	23.91	36.30	24.67	4.75
50	23.94	36.29	24.66	4.73
75	23.94	36.27	24.64	4.72
100	23.83	36.33	24.72	4.64
150	22.28	36.38	25.21	4.62
200	20.16	36.44	25.83	4.24
250	18.92	36.51	26.21	3.58
300	17.10	36.37	26.56	3.26
400	12.48	35.64	27.01	2.98

STATION 40

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.9	0.0	1.0	-	3.1
9	1.3	0.4	0.0	-	1.4
18	-	1.6	2.0	-	0.9
45	1.2	1.0	0.5	1.0	0.1
89	1.2	1.0	0.0	-	0.9
134	1.0	0.4	0.5	-	<0.1
178	1.0	0.4	0.5	1.5	0.8
266	1.4	0.7	0.0	3.1	0.8
352	2.6	0.8	4.5	0.0	0.5
429	-	1.3	18.5	-	-

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.9	0.0	1.0	-	3.1
10	1.3	0.4	0.0	-	1.4
20	-	1.6	2.0	-	0.9
30	1.3	1.3	1.5	-	0.6
50	1.2	1.0	0.5	1.0	0.2
75	1.2	1.0	<0.5	1.1	0.7
100	1.2	0.8	<0.5	1.2	0.7
150	1.0	0.4	0.5	1.4	0.3
200	1.1	0.5	0.5	1.9	0.8
250	1.4	0.7	<0.5	2.8	0.8
300	1.9	0.8	2.0	1.9	0.7
400	-	1.2	13.5	-	-

STATION 41

DATE Feb. 15, 1954 LAT. 31°42' N. LONG. 79°00' W. TIME 01
DEPTH 503 WIND 7 ,14 BAR. 28 AIR TEMP: dry 20.0 °C, wet 16.1 °C
HUMIDITY 67 % WEATHER 01 CLOUDS: type 8 ,amt. 4 SEA: dir. 14 ,amt. 2
SWELL: dir. 14 ,amt. 3 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	23.39	-	-	4.48
8	23.37	36.14	24.71	4.57
15	23.35	36.15	24.72	4.22
38	23.12	36.17	24.81	3.95
58	23.03	36.15	24.82	4.56
79	22.69	36.32	25.04	4.59
120	19.57	36.33	25.91	3.54
161	16.03	36.03	26.55	3.18
244	10.76*	35.57	27.28	2.96
327	10.53	35.35	27.15	2.74
410	9.34	35.26	27.29	2.98

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	23.39	-	-	4.48
10	23.37	36.14	24.71	4.46
20	23.29	36.16	24.75	4.07
30	23.18	36.17	24.79	3.98
50	23.09	36.16	24.81	4.38
75	22.82	36.30	24.99	4.58
100	21.14	36.33	25.49	3.97
150	16.92	36.11	26.40	3.26
200	14.15	35.78	26.78	3.08
250	12.25	35.55	26.99	2.93
300	11.05	35.40	27.10	2.76
400	9.52	35.26	27.26	2.93

STATION 41

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	-	2.0	0.0	1.3	0.3
8	1.4	<0.1	0.0	-	0.2
15	0.9	0.6	0.0	-	0.1
38	0.9	-	0.0	1.3	0.6
58	1.1	1.0	0.5	-	0.4
79	1.7	0.0	0.0	-	0.1
120	1.7	0.5	0.0	0.0	0.8
161	2.4	1.6	12.5	-	0.8
244	3.6	1.2	22.0	-	0.6
322	4.1	1.7	5.0*	-	0.6
410	4.7	2.0	21.0	-	-

* Value questionable

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	-	2.0	0.0	1.3	0.3
10	1.3	0.2	0.0	-	0.2
20	0.9	0.7	0.0	-	0.2
30	0.9	0.8	0.0	1.3	0.5
50	1.0	0.9	<0.5	-	0.4
75	1.6	0.2	<0.5	-	0.2
100	1.7	0.3	0.0	0.0	0.5
150	2.2	1.3	9.0	-	0.8
200	3.0	1.4	17.0	-	0.7
250	3.6	1.3	22.0	-	0.6
300	4.0	1.6	21.5	-	0.6
400	4.7	2.0	21.0	-	-

STATION 42

DATE Feb. 14, 1954 LAT. 31°57' N. LONG. 79°16' W. TIME 22
DEPTH 106 WIND 6 , 17 BAR. 28 AIR TEMP: dry 19.4 °C, wet 16.F°C
HUMIDITY 71 % WEATHER 03 CLOUDS: type 8 , amt. 7 SEA: dir. 16 , amt. 2
SWELL: dir. 14 , amt. 2 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	21.60	36.26	25.31	3.61
10	21.32	36.18	25.32	4.76
20	20.37	36.26	25.64	4.47
49	19.05	36.33	26.04	4.41
98	16.67	36.18	26.52	4.81

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	21.60	36.26	25.31	3.61
10	21.32	36.18	25.32	4.76
20	20.37	36.26	25.64	4.47
30	19.90	36.30	25.80	4.42
50	18.96	36.33	26.07	4.41
75	17.77	36.29	26.33	4.54

STATION 42

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.8	0.3	<0.5	0.0	0.5
10	-	0.0	1.5	-	1.0
20	1.9	0.2	0.0	1.7	2.3
49	-	1.7	1.5	0.0	0.8
98	1.7	-	<0.5	0.0	0.5

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.8	0.3	<0.5	0.0	0.5
10	1.9	0.0	1.5	0.9	1.0
20	1.9	0.2	0.0	1.7	2.3
30	1.9	0.7	0.5	1.1	1.8
50	1.8	1.7	1.5	0.0	0.8
75	1.8	-	1.0	0.0	0.7
100	1.7	-	<0.5	0.0	0.5

STATION 43

DATE Feb. 14, 1954 LAT. 32°12'N. LONG. 79°33'W. TIME 19
DEPTH 33 WIND -, - BAR. 25 AIR TEMP: dry 17.2 °C, wet 15.6 °C
HUMIDITY 85 % WEATHER 01 CLOUDS: type 1, amt. 3 SEA: dir. 00, amt. 0
SWELL: dir. 14, amt. 2 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	17.95	36.31	26.30	5.46
10	17.46	36.29	26.41	5.61
20	16.93	36.26	26.51	5.54

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	17.95	36.31	26.30	5.46
10	17.46	36.29	26.41	5.61
20	16.93	36.26	26.51	5.54

STATION 43

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	2.1	0.4	1.0	-	0.4
10	-	1.0	1.0	-	0.3
20	2.6	1.0	0.5	1.5	0.4

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	2.1	0.4	1.0	-	0.4
10	2.4	1.0	1.0	-	0.3
20	2.6	1.0	0.5	1.5	0.4

STATION 44

DATE Feb. 14, 1954 LAT. 32°26'N. LONG. 79°50'W. TIME 16
DEPTH 13 WIND 1 , 14 BAR. 31 AIR TEMP: dry 13.9 °C, wet 13.3 °C
HUMIDITY 94 % WEATHER 02 CLOUDS: type 1 , amt. 5 SEA: dir. 00 , amt. 0
SWELL: dir. 13 , amt. 2 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	12.46	35.55	26.94	5.98
10	12.52	35.71	27.06	5.89

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	12.46	35.55	26.94	5.98
10	12.52	35.71	27.06	5.89

STATION 44

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	2.0	1.8	0.0	0.2	1.2
10	2.0	-	0.0	-	0.9

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	2.0	1.8	0.0	0.2	1.2
10	2.0	-	0.0	-	0.9

STATION 46

DATE Feb. 16, 1954 LAT. 32°55' N. LONG. 79°16' W. TIME 01
DEPTH 13 WIND 1 , 12 BAR. 27 AIR TEMP: dry 18.3 °C, wet 16.7 °C
HUMIDITY 85 % WEATHER 03 CLOUDS: type 8 , amt. 4 SEA: dir. 00 , amt. 0
SWELL: dir. 15 , amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	12.45	34.05	25.79	6.21

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	12.45	34.05	25.79	6.21

STATION 46

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.4	0.9	2.0	-	1.6

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.4	0.9	2.0	-	1.6

STATION 47

DATE Feb. 15, 1954 LAT. 32°40'N. LONG. 79°00'W. TIME 22
DEPTH 29 WIND 4 , 12 BAR. 26 AIR TEMP: dry 25.6 °C, wet 21.1 °C
HUMIDITY 67 % WEATHER 02 CLOUDS: type 8 , amt. 1 SEA: dir. 00 , amt. 0
SWELL: dir. 17 , amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	18.44	36.32	26.19	5.68
10	17.39	36.31	26.44	5.76
20	17.17	36.29	26.48	5.72

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	18.44	36.32	26.19	5.68
10	17.39	36.31	26.44	5.76
20	17.17	36.29	26.48	5.72

STATION 47

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.3	1.0	0.0	0.0	0.6
10	2.4	1.2	<0.5	-	0.1
20	1.3	0.4	0.0	0.8	0.2

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.3	1.0	0.0	0.0	0.6
10	2.4	1.2	<0.5	0.4	0.1
20	1.3	0.4	0.0	0.8	0.2

STATION 48

DATE Feb. 15, 1954 LAT. 32°26' N. LONG. 78°42' W. TIME 19
DEPTH 238 WIND -, - BAR. 27 AIR TEMP: dry 22.8 °C, wet 18.9 °C
HUMIDITY 70 % WEATHER 02 CLOUDS: type 8, amt. 2 SEA: dir. 00, amt. 0
SWELL: dir. 17, amt. 2 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	19.41	36.36	25.97	5.01
10	19.17	36.36	26.03	4.66
20	19.10	36.34	26.04	4.74
50	18.96	36.33	26.07	3.95
100	17.98	36.33	26.31	3.61
150	15.97	36.15	26.66	3.43

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	19.41	36.36	25.97	5.01
10	19.17	36.36	26.03	4.66
20	19.10	36.34	26.04	4.74
30	19.09	36.34	26.04	4.43
50	18.96	36.33	26.07	3.95
75	18.60	36.33	26.16	3.76
100	17.98	36.33	26.31	3.61
150	15.97	36.15	26.66	3.43

STATION 48

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.2	1.3	0.5	-	0.1
10	1.5	1.3	2.5	-	0.4
20	1.2	0.8	2.0	-	0.5
50	1.9	1.4	1.5	-	0.3
100	1.8	1.5	5.0	-	0.8
150	1.9	-	11.0	-	0.7

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.2	1.3	0.5	-	0.1
10	1.5	1.3	2.5	-	0.4
20	1.2	0.8	2.0	-	0.5
30	1.4	1.0	2.0	-	0.4
50	1.9	1.4	1.5	-	0.3
75	1.9	1.5	3.5	-	0.6
100	1.8	1.5	5.0	-	0.8
150	1.9	-	11.0	-	0.7

STATION 49

DATE Feb. 15, 1954 LAT. 32°11' N. LONG. 78°27' W. TIME 15
DEPTH 336 WIND 5 , 18 BAR. 29 AIR TEMP: dry 22.2 °C, wet 17.8 °C
HUMIDITY 65 % WEATHER 02 CLOUDS: type 8 , amt. 3 SEA: dir. 20 , amt. 1
SWELL: dir. 17 , amt. 3 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	23.27	36.19	24.78	4.24
10	23.24	36.20	24.79	3.96
20	23.23	36.18	24.78	4.48
30	22.91	36.22	24.90	4.21
60	20.54	36.33	25.65	4.29
110	18.08	36.43	26.36	4.29
210	15.15	36.06	26.77	3.44
260	13.51	35.77	26.90	3.35
300	-	36.30*	-	4.66

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	23.27	36.19	24.78	4.24
10	23.24	36.20	24.79	3.96
20	23.23	36.18	24.78	4.48
30	22.91	36.22	24.90	4.21
50	21.26	36.30	25.43	4.27
75	19.73	36.38	25.90	4.32
100	18.52	36.43	26.25	4.31
150	16.96	36.32	26.55	3.84
200	15.46	36.11	26.74	3.48
250	13.85	35.83	26.88	3.38
300	-	-	-	4.66

STATION 49

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.0	0.7	0.5	3.0	0.0
10	1.7	0.3	1.0	1.4	0.4
20	1.2	0.4	0.0	0.0	0.5
30	-	0.6	0.0	-	0.0
60	1.6	0.6	0.5	0.0	0.1
110	1.6	0.6	7.5	-	0.7
210	2.0	-	2.0	1.4	0.2
260	2.0	1.8	5.0	-	1.2
300	0.9	0.8	0.5*	-	0.2

* Value questionable

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.0	0.7	0.5	3.0	0.0
10	1.7	0.3	1.0	1.4	0.4
20	1.2	0.4	0.0	0.0	0.5
30	1.3	0.6	0.0	0.0	0.0
50	1.6	0.6	0.5	0.0	0.1
75	1.6	0.6	4.0	0.2	0.4
100	1.6	0.6	7.5	0.5	0.7
150	1.7	1.0	5.0	1.0	0.5
200	2.0	1.4	2.0	1.4	0.2
250	2.0	1.8	5.0	-	1.2
300	0.9	0.8	-	-	0.2

STATION 50

DATE Feb. 15, 1954 LAT. 31°54' N. LONG. 78°10' W. TIME 11
DEPTH 658 WIND 5 , 18 BAR. 28 AIR TEMP: dry 20.6 °C, wet 17.2 °C
HUMIDITY 72 % WEATHER 02 CLOUDS: type 8 , amt. 3 SEA: dir. 18 , amt. 2
SWELL: dir. 14 , amt. 3 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	23.91	36.08	24.51	4.74
9	23.92	36.08	24.50	4.74
14	23.86	36.08	24.52	4.71
42	23.88	36.06	24.50	4.76
85	23.20	36.26	24.85	4.71
128	21.43	36.31	25.39	4.80
172	20.47	36.33	25.67	4.22
260	16.25	36.18	26.61	3.44
299	15.44	36.06	26.71	3.34
376	12.91	35.68	26.96	3.23
453	8.81	35.18	27.31	3.39

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	23.91	36.08	24.51	4.74
10	23.91	36.08	24.51	4.73
20	23.87	36.07	24.51	4.73
30	23.87	36.06	24.50	4.75
50	23.84	36.11	24.55	4.74
75	23.46	36.23	24.75	4.71
100	22.49	36.28	25.07	4.75
150	21.05	36.33	25.51	4.49
200	18.77	36.30	26.09	3.89
250	16.56	36.21	26.56	3.49
300	15.40	36.06	26.72	3.34
400	11.80	35.54	27.06	3.25

STATION 50

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.8	0.8	1.5	-	1.7
9	1.5	1.6	0.0	0.6	1.1
14	1.4	1.1	1.0	-	0.6
42	1.1	-	0.5	-	1.5
85	1.0	<0.1	0.0	-	0.2
128	-	1.5	0.5	-	0.4
172	1.4	-	3.5	-	0.1
260	2.1	0.9	12.0	-	0.1
299	2.2	1.3	12.0	-	0.6
376	-	2.9	21.0	-	0.1
453	3.3	3.0	20.0	1.4	0.9

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.8	0.8	1.5	-	1.7
10	1.5	1.6	0.0	0.6	1.1
20	1.3	1.0	1.0	-	0.8
30	1.2	0.9	0.5	-	1.1
50	1.1	0.6	0.5	-	1.3
75	1.1	0.2	<0.5	-	0.5
100	1.1	0.6	<0.5	-	0.3
150	1.3	1.4	2.0	-	0.2
200	1.6	1.2	6.0	-	0.1
250	2.0	1.0	11.0	-	0.1
300	2.2	1.3	12.0	-	0.6
400	3.0	3.0	20.5	1.4	0.3

STATION 51

DATE Feb. 16, 1954 LAT. 32°20' N. LONG. 77°30' W. TIME 21
DEPTH 622 WIND 9 , 14 BAR. 22 AIR TEMP: dry 21.1 °C, wet 18.3 °C
HUMIDITY 77 % WEATHER 21 CLOUDS: type 8 , amt. 6 SEA: dir. 19 , amt. 5
SWELL: dir. 17 , amt. 6 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	21.46	36.30	25.37	4.84
10	21.51	36.30	25.36	4.79
19	21.50	36.31	25.37	4.79
48	20.57	36.35	25.66	4.64
97	18.90	36.45	26.17	-
145	14.59	35.95	26.81	3.39
194	12.71	35.66	26.98	2.90
292	9.68	35.28	27.24	3.05
390	7.73	35.08	27.40	2.84
488	6.53	35.13*	27.61	4.25
586	6.42	35.12*	27.61	4.38

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	21.46	36.30	25.37	4.84
10	21.51	36.30	25.36	4.79
20	21.47	36.31	25.38	4.79
30	21.15	36.32	25.48	4.75
50	20.55	36.36	25.67	4.61
75	19.99	36.41	25.86	4.25
100	18.56	36.41	26.23	3.92
150	14.39	35.92	26.83	3.32
200	12.49	35.63	27.00	2.92
250	10.85	35.42	27.15	3.03
300	9.49	35.25	27.25	2.97
400	7.56	-	-	3.04
500	6.46	-	-	4.33

STATION 51

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.3	0.6	1.0	-	0.8
10	1.1	-	0.5	0.4	0.1
19	1.3	0.6	1.0	-	0.7
48	2.0	0.3	0.5	-	0.2
97	3.2	1.2	5.5	-	0.2
145	3.2	1.0	15.5	-	0.9
194	3.3	1.2	15.5	-	0.7
292	3.0	2.4	1.0*	-	0.6
390	4.3	1.8	17.5	-	0.5
488	4.2	1.2	21.5	-	0.5
586	1.5	1.7	10.0	-	0.6

Value questionable

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.3	0.6	1.0	-	0.8
10	1.1	0.6	0.5	0.4	0.1
20	1.3	0.6	1.0	-	0.7
30	1.5	0.5	1.0	-	0.5
50	2.0	0.3	0.5	-	0.2
75	2.6	0.7	3.0	-	0.2
100	3.2	1.2	5.5	-	0.2
150	3.2	1.0	15.5	-	0.9
200	3.3	1.2	15.5	-	0.7
250	3.2	1.8	16.0	-	0.7
300	3.0	2.4	16.5	-	0.6
400	4.3	1.8	17.5	-	0.5
500	3.9	1.3	20.0	-	0.5

STATION 52

DATE Feb. 16, 1954 LAT. 32°33' N. LONG. 77°50' W. TIME 18
DEPTH 329 WIND 5 , 16 BAR. 25 AIR TEMP: dry 21.1 °C, wet 18.3 °C
HUMIDITY 77 % WEATHER 03 CLOUDS: type 8 , amt. 7 SEA: dir. 16 , amt. 3
SWELL: dir. 14 , amt. 6 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	20.89	36.36	25.58	4.97
10	20.92	36.36	25.57	4.96
20	20.75	36.34	25.60	4.95
50	19.42	36.43	26.02	4.96
100	18.18	36.45	26.35	4.62
150	16.09	36.21	26.67	3.78
200	12.59	35.65	27.00	3.26
300	10.18	35.34	27.21	3.16

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	20.89	36.36	25.58	4.97
10	20.92	36.36	25.57	4.96
20	20.75	36.34	25.60	4.95
30	20.26	36.38	25.76	4.95
50	19.42	36.43	26.02	4.96
75	18.91	36.44	26.16	4.85
100	18.18	36.45	26.35	4.62
150	16.09	36.21	26.67	3.78
200	12.59	35.65	27.00	3.26
250	11.23	35.46	27.11	3.21
300	10.18	35.34	27.21	3.16

STATION 52

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.3	0.4	0.5	0.0	0.8
10	1.3	0.2	0.0	-	0.8
20	1.2	1.2	0.5	-	0.6
50	1.0	0.3	2.0	-	0.4
100	1.5	1.1	3.0	-	1.3
150	2.7	0.6	3.0	0.8	-
200	3.2	0.8	9.0	-	0.4
300	2.5	1.4	23.5	-	0.5

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.3	0.4	0.5	0.0	0.8
10	1.3	0.2	0.0	-	0.8
20	1.2	1.2	0.5	-	0.6
30	1.1	0.9	1.0	-	0.5
50	1.0	0.3	2.0	-	0.4
75	1.3	0.7	2.5	-	0.9
100	1.5	1.1	3.0	-	1.3
150	2.7	0.6	3.0	0.8	0.9
200	3.2	0.8	9.0	-	0.4
250	2.9	1.1	16.0	-	0.5
300	2.5	1.4	23.5	-	0.5

STATION 53

DATE Feb. 16, 1954 LAT. 32°48' N. LONG. 78°04'W. TIME 14
DEPTH 165 WIND 8 , 17 BAR. 23 AIR TEMP: dry 20.6 °C, wet 17.8 °C
HUMIDITY 77 % WEATHER 01 CLOUDS: type 8 , amt. 1 SEA: dir. 17 , amt. 1
SWELL: dir. 14 , amt. 5 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	19.85	36.38	25.87	5.05
10	19.80	36.36	25.87	5.06
20	19.78	36.36	25.87	5.02
50	19.61	36.44	25.98	4.94
100	17.86	36.42	26.41	3.92
150	16.11	36.17	26.64	3.78*

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	19.85	36.38	25.87	5.05
10	19.80	36.36	25.87	5.06
20	19.78	36.36	25.87	5.02
30	19.72	36.39	25.91	5.04
50	19.61	36.44	25.98	4.94
75	18.74	36.43	26.20	4.57
100	17.86	36.42	26.41	3.92
150	16.11	36.17	26.64	-

STATION 53

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	-	1.5	<0.5	0.7	0.4
10	2.4	0.6	1.0	-	0.3
20	1.7	0.1	0.0	0.0	6.1
50	2.0	0.4	1.5	0.5	0.6
100	2.5	0.7	3.5	-	0.5
150	2.5	0.6	8.0	-	0.2

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	-	1.5	<0.5	0.7	0.4
10	2.4	0.6	1.0	0.4	0.3
20	1.7	0.1	0.0	0.0	6.1
30	1.8	0.2	0.5	0.2	-
50	2.0	0.4	1.5	0.5	0.6
75	2.3	0.6	2.5	-	0.6
100	2.5	0.7	3.5	-	0.5
150	2.5	0.6	8.0	-	0.2

STATION 54

DATE Feb. 16, 1954 LAT. 33°03' N. LONG. 78°21' W. TIME 11
DEPTH 29 WIND 5 , 16 BAR. 25 AIR TEMP: dry 18.9 °C, wet 18.3 °C
HUMIDITY 95 % WEATHER 02 CLOUDS: type 8 , amt. 1 SEA: dir. 15 , amt. 1
SWELL: dir. 14 , amt. 5 VIS. 6 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	18.56	36.36	26.19	3.80
10	18.53	36.37	26.21	4.97
20	17.41	36.16	26.32	4.31

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	18.56	36.36	26.19	3.80
10	18.53	36.37	26.21	4.97
20	17.41	36.16	26.32	4.31

STATION 54

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.0	0.5	0.0	1.0	0.9
10	1.4	-	0.0	-	0.4
20	1.7	1.7	0.5	-	0.5

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.0	0.5	0.0	1.0	0.9
10	1.4	1.1	0.0	-	0.4
20	1.7	1.7	0.5	-	0.5

STATION 55

DATE Feb. 16, 1954 LAT. 33°18' N. LONG. 78°38' W. TIME 08
DEPTH 18 WIND 2 , 15 BAR. 26 AIR TEMP: dry 16.1 °C, wet 15.6 °C
HUMIDITY 95 % WEATHER 02 CLOUDS: type 4 , amt. 2 SEA: dir. 00 , amt. 0
SWELL: dir. 14 , amt. 5 VIS. 6 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	14.30	35.48	26.51	5.09
10	14.02	35.69	26.73	4.67

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	14.30	35.48	26.51	5.09
10	14.02	35.69	26.73	4.67

STATION 55

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.4	0.3	2.5	0.1	0.3
10	2.1	0.5	0.0	3.8	0.8

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.4	0.3	2.5	0.1	0.3
10	2.1	0.5	0.0	3.8	0.8

STATION 56

DATE Feb. 16, 1954 LAT. 33°32' N. LONG. 78°55' W. TIME 06
DEPTH 9 WIND 4 , 15 BAR. 27 AIR TEMP: dry 16.1 °C, wet 15.0 °C
HUMIDITY 89% WEATHER 03 CLOUDS: type 2 , amt. 9 SEA: dir. 00 , amt. 0
SWELL: dir. 00 , amt. 0 VIS. 5 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	10.97	34.75	26.61	4.97

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	10.97	34.75	26.61	4.97

STATION 56

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.9	0.5	0.0	0.3	0.2

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.9	0.5	0.0	0.3	0.2

STATION 58

DATE Feb. 17, 1954 LAT. 33°33' N. LONG. 77°49' W. TIME 15
DEPTH 20 WIND 9 , 24 BAR. 13 AIR TEMP: dry 15.6 °C, wet 15.6 °C
HUMIDITY 99 % WEATHER 01 CLOUDS: type 1 , amt. 1 SEA: dir. 23 , amt. 6
SWELL: dir. 00 , amt. 0 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	14.22	36.15	27.05	4.87
10	14.16	36.13	27.04	5.74

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	14.22	36.15	27.05	4.87
10	14.16	36.13	27.04	5.74

STATION 58

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.9	1.0	<0.5	-	0.2
10	1.8	1.8	1.5	1.4	<0.1

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.9	1.0	<0.5	-	0.2
10	1.8	1.8	1.5	1.4	<0.1

STATION 59

DATE Feb. 17, 1954 LAT. 33°22' N. LONG. 77°36' W. TIME 12
DEPTH 24 WIND 13 , 26 BAR. 15 AIR TEMP: dry 17.8 °C, wet 17.8 °C
HUMIDITY 99 % WEATHER 01 CLOUDS: type 5 , amt. 3 SEA: dir. 24 , amt. 5
SWELL: dir. 20 , amt. 6 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	17.58	36.42	26.48	5.62
10	17.59	36.43	26.49	5.54
20	17.56	36.42	26.49	5.39

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	17.58	36.42	26.48	5.62
10	17.59	36.43	26.49	5.54
20	17.56	36.42	26.49	5.39

STATION 59

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.7	1.5	0.0	-	0.1
10	1.8	-	0.0	0.0	0.5
20	-	1.5	0.5	0.0	0.3

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.7	1.5	0.0	-	0.1
10	1.8	1.5	0.0	0.0	0.5
20	-	1.5	0.5	0.0	0.3

STATION 61

DATE Feb. 17, 1954 LAT. 32°54' N. LONG. 77°03' W. TIME 06
DEPTH 485 WIND 15 , 18 BAR. 19 AIR TEMP: dry 20.0 °C, wet 18.9 °C
HUMIDITY 90 % WEATHER 03 CLOUDS: type 5 , amt. 7 SEA: dir. 18 , amt. 5
SWELL: dir. 20 , amt. 6 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	20.28	36.36	25.74	4.78
9	20.29	36.35	25.73	4.90
19	20.26	36.35	25.74	4.97
47	20.25	36.36	25.75	4.98
95	18.67	36.35	26.15	3.58
142	14.24	35.93	26.87	3.22
190	12.56	35.63	26.99	3.11
285	9.10	35.23	27.30	3.22
380	6.98	35.12	27.54	4.07

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	20.28	36.36	25.74	4.78
10	20.29	36.35	25.73	4.91
20	20.26	36.35	25.74	4.98
30	20.25	36.36	25.75	4.98
50	20.24	36.36	25.75	4.86
75	19.69	36.36	25.90	4.04
100	18.07	36.30	27.27	3.53
150	13.96	35.88	26.89	3.19
200	12.13	35.57	27.02	3.09
250	10.22	35.34	27.20	3.14
300	8.68	35.19	27.34	3.31

STATION 61

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.1	-	0.0	-	0.5
9	1.3	0.3	0.0	-	0.6
19	-	0.8	1.5	1.3	0.8
47	2.2	1.3	1.0	0.6	0.9
95	2.3	1.0	7.0	0.0	1.5
142	2.1	2.1	7.0	0.0	-
190	2.0	1.9	10.5	4.4	0.4
285	2.5	1.5	11.0	0.6	0.6
380	2.4	2.1	14.5	-	0.7

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.1	-	0.0	-	0.5
10	1.3	0.3	0.0	-	0.6
20	1.5	0.8	1.5	1.3	0.8
30	1.7	1.0	1.5	1.1	0.8
50	2.2	1.3	1.0	0.6	0.9
75	2.3	1.2	4.0	0.3	1.2
100	2.3	1.0	7.0	0.0	1.5
150	2.1	2.1	7.5	0.7	1.0
200	2.1	1.9	10.5	4.0	0.4
250	2.3	1.7	11.0	2.0	0.5
300	2.5	1.6	11.5	0.6	0.6

STATION 62

DATE Feb. 17, 1954 LAT. 32°38' N. LONG. 76°49' W. TIME 03
DEPTH 750 WIND 14, 17 BAR. 20 AIR TEMP: dry 21.1 °C, wet 19.4 °C
HUMIDITY 86 % WEATHER 02 CLOUDS: type 6, amt. 8 SEA: dir. 18, amt. 4
SWELL: dir. 17, amt. 6 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	21.05	36.31	25.50	4.77
9	21.09	36.37	25.53	4.60
18	21.09	36.34	25.51	5.02
44	20.85	36.36	25.59	4.65
89	20.33	36.39	25.75	4.79
134	16.01	36.18	26.67	3.24
179	13.53	35.75	26.88	2.79
270	10.21	35.28	27.15	2.31
362	8.65	35.15	27.31	2.78
454	6.82	35.10	27.54	3.92
547	5.40	35.07	27.70	4.66

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	21.05	36.31	25.50	4.77
10	21.09	36.37	25.53	4.66
20	21.07	36.34	25.51	4.98
30	20.98	36.35	25.55	4.81
50	20.78	36.36	25.61	4.67
75	20.52	36.38	25.69	4.77
100	19.10	36.36	26.05	4.31
150	15.06	36.01	26.75	3.06
200	12.61	35.61	26.96	2.60
250	10.79	35.35	27.10	2.33
300	9.73	35.23	27.20	2.39
400	7.84	35.13	27.42	3.30
500	6.06	35.08	27.63	4.34

STATION 62

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	2.1	1.5	<0.5	-	0.1
9	1.9	0.8	0.5	-	0.0
18	-	-	0.5	-	0.7
44	1.6	-	0.0	-	0.3
89	2.0	0.3	0.0	-	0.4
134	2.4	1.8	3.0	-	0.8
179	3.0	2.3	1.5	-	0.1
270	2.6	2.4	15.5	-	0.7
362	3.1	0.3*	22.0	-	0.2
454	2.8	3.1	17.5	-	0.3
547	2.3	1.4	11.5	-	1.2

* Value questionable

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	2.1	1.5	<0.5	-	0.1
10	1.9	0.8	0.5	-	0.0
20	1.8	0.8	0.5	-	0.7
30	1.7	0.7	<0.5	-	0.5
50	1.7	0.5	0.0	-	0.3
75	1.9	0.4	0.0	-	0.4
100	2.1	0.7	1.0	-	0.5
150	2.6	2.0	2.5	-	0.5
200	2.9	2.3	5.0	-	0.2
250	2.7	2.4	12.5	-	0.6
300	2.8	2.5	17.5	-	0.5
400	3.0	2.9	20.0	-	0.3
500	2.6	2.3	14.5	-	0.8

STATION 63

DATE Feb. 21, 1954 LAT. 33°15'N. LONG. 76°22'W. TIME 09
DEPTH 750 WIND 12 , 13 BAR. 20 AIR TEMP: dry 20.0°C, wet 16.1°C
HUMIDITY 67% WEATHER 02 CLOUDS: type 8 , amt. 7 SEA: dir. 12 , amt. 5
SWELL: dir. 14 , amt. 4 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	22.47	36.29	25.08	4.86
10	22.49	36.20	25.01	4.75
19	22.52	36.20	25.00	4.84
48	22.00	36.36	25.27	5.03
97	18.72	36.34	26.13	3.54
145	15.37	36.04	26.71	3.20
194	12.72	35.66	26.98	3.09
291	9.98	35.30	27.21	3.10
389	7.95	35.13	27.40	3.22
487	7.15	35.08	27.48	3.58
682	4.93	35.08	27.77	5.20

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	22.47	36.29	25.08	4.86
10	22.49	36.20	25.01	4.75
20	22.52	36.21	25.01	4.86
30	22.45	36.28	25.08	5.01
50	21.87	36.36	25.31	4.95
75	20.21	36.35	25.75	4.07
100	18.49	36.32	26.18	3.51
150	15.06	36.00	26.75	3.19
200	12.53	35.63	26.99	3.09
250	11.05	35.43	27.12	3.09
300	9.74	35.28	27.23	3.10
400	7.87	35.12	27.41	3.25
500	7.03	35.08	27.50	3.65
600	5.97	35.08	27.64	4.37

STATION 63

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.5	1.2	0.0	-	0.7
10	2.5	0.0	-	0.0	1.5
19	1.6	0.2	0.0	-	0.4
48	2.0	0.0	1.5	0.1	0.9
97	2.0	0.2	4.5	-	0.7
145	2.0	-	3.0	1.0	0.7
194	3.9	0.5	5.0	0.9	0.4
291	3.0	1.9	15.0	1.2	0.6
389	3.0	2.4	25.5	-	1.3
487	3.5	2.8	13.0	-	0.1
682	2.4	1.8	13.0	3.5	0.8

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.5	1.2	0.0	-	0.7
10	2.5	0.0	0.0	0.0	1.5
20	1.6	0.2	0.0	<0.1	0.4
30	1.7	0.1	0.5	<0.1	0.6
50	2.0	0.0	1.5	0.1	0.9
75	2.0	0.1	3.0	0.4	0.8
100	2.0	0.2	4.5	0.6	0.7
150	2.0	0.4	3.0	1.0	0.7
200	3.9	0.5	5.0	0.9	0.4
250	3.5	1.2	10.0	1.1	0.5
300	3.0	1.9	15.0	1.2	0.6
400	3.1	2.5	24.0	-	1.2
500	3.4	2.7	13.0	-	0.2
600	2.9	2.2	13.0	3.5	0.5

STATION 64

DATE Feb. 21, 1954 LAT. 33°28'N. LONG. 76°39'W. TIME 03
DEPTH 302 WIND 9 , 12 BAR. 24 AIR TEMP: dry 20.0 °C, wet 16.1 °C
HUMIDITY 67% WEATHER 02 CLOUDS: type 8 , amt. 6 SEA: dir. 13 , amt. 2
SWELL: dir. 14 , amt. 3 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	21.39	36.31	25.40	4.81
10	21.40	36.29	25.38	4.82
19	21.39	36.26	25.36	4.68
48	20.61	36.31	25.62	4.68
96	19.41	36.40	26.00	4.35
145	16.46	36.38	26.72	3.05
194	13.76	35.81	26.88	3.06
242	11.30	35.42	27.07	2.72

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	21.39	36.31	25.40	4.81
10	21.40	36.29	25.38	4.82
20	21.36	36.26	25.37	4.68
30	21.09	36.28	25.46	4.68
50	20.59	36.32	25.63	4.68
75	20.14	36.37	25.79	4.61
100	19.16	36.40	26.07	4.19
150	16.18	36.34	26.75	3.05
200	13.44	35.75	26.90	3.04

STATION 64

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.7	1.7	0.5	-	0.5
10	1.4	0.2	0.5	2.1	1.0
19	1.1	0.6	1.0	-	1.0
48	1.7	0.6	1.0	-	0.4
96	-	-	2.0	-	0.0
145	2.5	1.0	11.5	1.7	0.2
194	2.8	1.3	14.0	-	0.7
242	2.0	1.6	16.5	-	0.0

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.7	1.7	0.5	-	0.5
10	1.4	0.2	0.5	2.1	1.0
20	1.1	0.6	1.0	-	1.0
30	1.3	0.6	1.0	-	0.8
50	1.7	0.6	1.0	-	0.4
75	1.9	1.7	1.5	-	0.2
100	2.2	1.4	2.0	-	0.0
150	2.5	1.0	11.5	1.7	0.2
200	2.8	1.3	14.0	-	0.7
250	2.0	1.6	16.5	-	0.0

STATION 65

DATE Feb. 20, 1954 LAT. 33°43' N. LONG. 76°56' W. TIME 24
DEPTH 40 WIND 9 , 14 BAR. 24 AIR TEMP: dry 20.0 °C, wet 16.1 °C
HUMIDITY 67 % WEATHER 02 CLOUDS: type 4 , amt. 7 SEA: dir. 14 , amt. 3
SWELL: dir. 15 , amt. 3 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	20.75	36.33	25.59	4.42
10	20.76	36.31	25.57	5.05
20	20.73	36.33	25.60	4.48
30	20.64	36.29	25.59	5.05

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	20.75	36.33	25.59	4.42
10	20.76	36.31	25.57	5.05
20	20.73	36.33	25.60	4.48
30	20.64	36.29	25.59	5.05

STATION 65

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.2	0.7	0.0	2.9	0.9
10	2.2	1.9	1.0	0.3	0.2
20	1.6	-	0.0	1.0	0.4
30	3.1	-	0.5	0.5	0.6

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.2	0.7	0.0	2.9	0.9
10	2.2	1.9	1.0	0.3	0.2
20	1.6	-	0.0	1.0	0.4
30	3.1	-	0.5	0.5	0.6

STATION 66

DATE Feb. 20, 1954 LAT. 33°57' N. LONG. 77°13' W. TIME 21
DEPTH 27 WIND 8 , 11 BAR. 24 AIR TEMP: dry 18.3 °C, wet 16.1°C
HUMIDITY 80 % WEATHER 01 CLOUDS: type 5 , amt. 6 SEA: dir. 13 , amt. 2
SWELL: dir. 15 , amt. 4 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	18.26	36.38	26.28	5.32
10	18.24	36.36	26.27	5.33
20	14.30	35.88	26.82	5.64

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	18.26	36.38	26.28	5.32
10	18.24	36.36	26.27	5.33
20	14.30	35.88	26.82	5.64

STATION 66

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.5	0.5	0.0	-	0.7
10	1.1	0.6	0.0	2.2	0.6
20	1.5	0.4	0.0	0.3	0.5

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.5	0.5	0.0	-	0.7
10	1.1	0.6	0.0	2.2	0.6
20	1.5	0.4	0.0	0.3	0.5

STATION 67

DATE Feb. 17, 1954 LAT. 34°11' N. LONG. 77°29' W. TIME 20
DEPTH 18 WIND 7 , 30 BAR. 13 AIR TEMP: dry 14.4 °C, wet 12.8 °C
HUMIDITY 84 % WEATHER 02 CLOUDS: type 4 , amt. 1 SEA: dir. 30 , amt. 2
SWELL: dir. 21 , amt. 4 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	12.14	34.88	26.49	4.87
10	11.91	35.25	26.82	5.37

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	12.14	34.88	26.49	4.87
10	11.91	35.25	26.82	5.37

STATION 67

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	2.8	0.7	0.5	-	0.4
10	1.9	0.6	0.0	-	2.2

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	2.8	0.7	0.5	-	0.4
10	1.9	0.6	0.0	-	2.2

STATION 68

DATE Feb. 20, 1954 LAT. 34°22' N. LONG. 77°09' W. TIME 17
DEPTH 22 WIND 6 , 12 BAR. 26 AIR TEMP: dry 17.8 °C, wet 15.0 °C
HUMIDITY 75% WEATHER 02 CLOUDS: type 5 , amt. 7 SEA: dir. 14 , amt. 2
SWELL: dir. 15 , amt. 4 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	14.00	36.13	27.08	5.71
10	13.12	36.08	27.22	5.59

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	14.00	36.13	27.08	5.71
10	13.12	36.08	27.22	5.59

STATION 68

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	2.8	1.8	0.0	-	0.2
10	1.9	0.0	0.0	0.0	0.3

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	2.8	1.8	0.0	-	0.2
10	1.9	0.0	0.0	0.0	0.3

STATION 69

DATE Feb. 20, 1954 LAT. 34°32' N. LONG. 76°49' W. TIME 15
DEPTH 18 WIND 4 , 11 BAR. 27 AIR TEMP: dry 14.4 °C, wet 12.8 °C
HUMIDITY 84 % WEATHER 03 CLOUDS: type 5 , amt. 7 SEA: dir. 00 , amt. 0
SWELL: dir. 15 , amt. 4 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	11.43	35.80	27.34	6.16
10	11.51	35.90	27.40	6.18

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	11.43	35.80	27.34	6.16
10	11.51	35.90	27.40	6.18

STATION 69

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.3	0.5	0.0	-	0.5
10	0.9	0.0	0.5	2.1	0.4

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.3	0.5	0.0	-	0.5
10	0.9	0.0	0.5	2.1	0.4

STATION 70

DATE Feb. 22, 1954 LAT. 34°18'N. LONG. 76°26'W. TIME 16
DEPTH 26 WIND 6 , 33 BAR. 26 AIR TEMP: dry 19.4°C, wet 12.8°C
HUMIDITY 46% WEATHER 02 CLOUDS: type 8 , amt. 2 SEA: dir. 33 , amt. 2
SWELL: dir. 19 , amt. 3 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	18.45	36.44	26.28	5.28
10	18.45	36.42	26.26	4.82
20	18.41	36.41	26.27	4.76

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	18.45	36.44	26.28	5.28
10	18.45	36.42	26.26	4.82
20	18.41	36.41	26.27	4.76

STATION 70

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.0	0.3	0.0	0.7	0.3
10	1.8	0.4	0.0	0.0	0.5
20	1.2	<0.1	1.5	4.1	1.3

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.0	0.3	0.0	0.7	0.3
10	1.8	0.4	0.0	0.0	0.5
20	1.2	<0.1	1.5	4.1	1.3

STATION 71

DATE Feb. 22, 1954 LAT. 34°03'N. LONG. 76°15'W. TIME 19
DEPTH 146 WIND 8 , 33 BAR. 15 AIR TEMP: dry 16.1°C, wet 13.9°C
HUMIDITY 79% WEATHER 03 CLOUDS: type 8 , amt. 7 SEA: dir. 33 , amt. 3
SWELL: dir. 31 , amt. 3 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	21.60	36.29	25.33	4.09
10	21.60	36.26	25.31	4.28
20	21.49	36.27	25.34	4.58
50	20.78	36.28	25.55	4.83
100	20.14	36.35	25.77	4.31

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	21.60	36.29	25.33	4.09
10	21.60	36.26	25.31	4.28
20	21.49	36.27	25.34	4.58
30	21.23	36.27	25.42	4.71
50	20.78	36.28	25.55	4.83
75	20.38	36.31	25.68	4.72
100	20.14	36.35	25.77	4.31

STATION 71

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.9	1.8	0.0	-	0.7
10	1.3	0.1	1.0	-	0.3
20	1.3	1.3	0.5	-	0.7
50	1.3	1.0	0.0	2.8	0.6
100	1.5	1.4	0.0	-	0.4

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.9	1.8	0.0	-	0.7
10	1.3	0.1	1.0	-	0.3
20	1.3	1.3	0.5	-	0.7
30	1.3	1.2	<0.5	-	0.7
50	1.3	1.0	0.0	2.8	0.6
75	1.4	1.2	0.0	-	0.5
100	1.5	1.4	0.0	-	0.4

STATION 75

DATE Feb. 23, 1954 LAT. 34°39'N. LONG. 75°53'W. TIME 01
DEPTH 37 WIND 5 , 03 BAR. 17 AIR TEMP: dry 14.4 °C, wet 10.6 °C
HUMIDITY 62 % WEATHER 02 CLOUDS: type 0 , amt. 2 SEA: dir. 03 , amt. 2
SWELL: dir. 00 , amt. 0 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	21.59	36.42	25.43	4.95
10	21.59	36.42	25.43	4.93
20	20.89	36.34	25.56	5.05
30	20.17	36.34	25.76	5.17

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	21.59	36.42	25.43	4.95
10	21.59	36.42	25.43	4.93
20	20.89	36.34	25.56	5.05
30	20.17	36.34	25.76	5.17

STATION 75

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	2.2	1.7	0.5	0.0	<0.1
10	2.5	1.0	0.0	1.8	0.4
20	2.1	2.0	0.0	-	0.3
30	2.2	2.1	0.5	0.0	0.6

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	2.2	1.7	0.5	0.0	<0.1
10	2.5	1.0	0.0	1.8	0.4
20	2.1	2.0	0.0	0.9	0.3
30	2.2	2.1	0.5	0.0	0.6

STATION 76

DATE Feb. 23, 1954 LAT. 34°53' N. LONG. 76°09' W. TIME 03
DEPTH 20 WIND 4 , 29 BAR. 18 AIR TEMP: dry 13.9 °C, wet 11.7 °C
HUMIDITY 78 % WEATHER 02 CLOUDS: type 0, amt. 2 SEA: dir. 00 , amt. 0
SWELL: dir. 00 , amt. 0 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	15.58	35.59	26.31	5.77
10	16.56	35.99	26.40	5.61

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	15.58	35.59	26.31	5.77
10	16.56	35.99	26.40	5.61

STATION 76

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	4.5	2.9	0.0	0.0	0.2
10	3.5	0.0	0.0	1.5	1.0

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	4.5	2.9	0.0	0.0	0.2
10	3.5	0.0	0.0	1.5	1.0

STATION 77

DATE Feb. 23, 1954 LAT. 35°01'N. LONG. 75°44'W. TIME 05
DEPTH 24 WIND 7 , 03 BAR. 20 AIR TEMP: dry 12.8°C, wet 9.4°C
HUMIDITY 65% WEATHER 00 CLOUDS: type - , amt. 0 SEA: dir. 04 , amt. 2
SWELL: dir. 08 , amt. 1 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	14.77	35.18	26.18	4.69
10	14.76	35.17	26.17	4.86
20	16.05	36.01	26.53	4.56

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	14.77	35.18	26.18	4.69
10	14.76	35.17	26.17	4.86
20	16.05	36.01	26.53	4.56

STATION 77

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	2.2	1.4	0.0	0.4	0.6
10	2.6	2.4	0.0	0.0	0.2
20	2.7	1.7	0.0	0.0	0.3

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	2.2	1.4	0.0	0.4	0.6
10	2.6	2.4	0.0	0.0	0.2
20	2.7	1.7	0.0	0.0	0.3

STATION Standard 1

DATE Jan. 23, 1954 LAT. 26°20'N. LONG. 76°44'W. TIME 18
DEPTH 4755 WIND 6 , 34 BAR. 18 AIR TEMP: dry 22.2°C, wet 20.6°C
HUMIDITY 87% WEATHER 03 CLOUDS: type 8 , amt. 3 SEA: dir. 34 , amt. 3
SWELL: dir. 30 , amt. 2 VIS. 8 WATER TRANS. 29

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	24.06	36.47	24.76	4.81
9	24.04	36.47	24.76	4.72
18	24.10	36.51	24.77	4.80
47	23.99	36.58	24.86	4.81
94	23.51	36.51	24.95	4.79
141	22.19	36.62	25.41	4.58
189	20.27	36.66	25.97	4.50
285	18.62	36.51	26.29	4.54
382	17.51	36.40	26.48	4.32
576	13.20	35.72	26.93	3.67
723	9.10	35.18	27.26	3.34
971	5.98	35.03	27.60	4.59

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	24.06	36.47	24.76	4.81
10	24.05	36.47	24.76	4.73
20	24.10	36.52	24.78	4.80
30	24.07	36.55	24.81	4.81
50	23.98	36.57	24.86	4.80
75	23.70	36.54	24.92	4.79
100	23.37	36.53	25.01	4.77
150	21.77	36.63	25.54	4.57
200	20.05	36.64	26.02	4.50
250	19.16	36.56	26.19	4.52
300	18.45	36.49	26.32	4.52
400	17.16	36.34	26.52	4.27
500	15.04	35.99	26.74	3.90
600	12.42	35.61	27.00	3.55
800	7.80	35.08	27.39	3.54

STATION Standard 1

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.7	0.7	<0.5	0.0	0.3
9	2.6	0.2	0.0	0.0	0.2
18	0.6	0.6	0.5	0.2	1.4
47	0.9	0.5	0.0	0.9	0.2
94	10.5*	0.3	<0.5	1.1	0.3
141	0.7	0.6	0.0	0.0	0.3
189	0.7	0.3	0.0	3.6	0.4
285	1.2	0.6	1.5	-	0.2
382	-	0.9	1.5	-	<0.1
576	-	1.4	10.5	-	-
723	2.6	1.6	7.0	1.4	0.9
971	2.3	1.5	5.5	-	1.6

* Value questionable

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.7	0.7	<0.5	0.0	0.3
10	2.6	0.2	0.0	0.0	0.2
20	0.6	0.6	0.5	0.3	1.3
30	0.7	0.5	<0.5	0.5	0.9
50	0.9	0.5	0.0	0.9	0.2
75	0.9	0.4	<0.5	1.1	0.3
100	0.8	0.3	<0.5	1.0	0.3
150	0.7	0.6	0.0	0.7	0.3
200	0.8	0.3	<0.5	3.6	0.4
250	1.0	0.5	1.0	-	0.3
300	1.2	0.6	1.5	-	0.2
400	1.6	1.0	2.5	-	0.1
500	1.9	1.2	7.0	-	0.4
600	2.2	1.4	10.0	-	0.6
700	2.5	1.6	7.5	1.4	0.8
800	2.5	1.6	6.5	-	1.1

STATION Standard 2

DATE Jan. 23, 1954 LAT. 26°20' N. LONG. 76°44' W. TIME 21
DEPTH 4901 WIND 9 , 33 BAR. 19 AIR TEMP: dry 21.7 °C, wet 19.4 °C
HUMIDITY 81 % WEATHER 02 CLOUDS: type 6 , amt. 6 SEA: dir. 34 , amt. 3
SWELL: dir. 30 , amt. 2 VIS. 8 WATER TRANS. 21

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	24.35	36.56	24.74	-
10	24.35	36.56	24.74	3.94*
20	24.39	36.53	24.70	-
49	24.15	36.60	24.83	4.19*
98	23.86	36.67	24.97	-
148	22.03	36.71	25.53	4.17*
197	20.41	37.41*	26.51	-
296	18.46	36.52	26.34	-
396	17.29	36.35	26.50	-
595	12.96	35.64	26.91	-
795	8.54	35.09	27.28	-
995	5.92	34.99	27.58	3.82*

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	24.35	36.56	24.74	-
10	24.35	36.56	24.74	-
20	24.39	36.53	24.70	-
30	24.30	36.56	24.75	-
50	24.14	36.60	24.83	-
75	24.00	36.64	24.90	-
100	23.78	36.67	24.99	-
150	21.96	36.71	25.55	-
200	20.34	36.65	25.95	-
250	19.27	36.59	26.18	-
300	18.43	36.52	26.35	-
400	17.20	36.33	26.50	-
500	15.04	35.96	26.72	-
600	12.83	35.62	26.93	-
800	8.45	35.08	27.29	-

STATION Standard 3

DATE Jan. 24, 1954 LAT. 26°21' N. LONG. 76°44' W. TIME 01
DEPTH 4500 WIND 7, 33 BAR. 20 AIR TEMP: dry 21.7°C, wet 18.3°C
HUMIDITY 73% WEATHER 01 CLOUDS: type 6, amt. 2 SEA: dir. 33, amt. 3
SWELL: dir. 30, amt. 2 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	24.20	36.52	24.75	4.81
10	24.24	36.49	24.72	4.40*
20	24.21	36.52	24.75	-
50	24.02	36.55	24.83	-
99	23.05	36.51	25.08	4.23*
149	22.09	36.67	25.48	-
199	20.13	36.65	26.00	-
299	18.26	36.49	26.37	3.72*
399	17.05	36.36	26.56	3.90*
598	12.58	35.61	26.97	-
798	8.56	35.12	27.30	-
998	5.64	35.02	27.64	4.07*

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	24.20	36.52	24.75	4.81
10	24.24	36.49	24.72	-
20	24.21	36.52	24.75	-
30	24.18	36.53	24.77	-
50	24.02	36.55	24.83	-
75	23.52	36.51	24.95	-
100	23.04	36.51	25.09	-
150	22.04	36.67	25.49	-
200	20.11	36.65	26.01	-
250	19.09	36.56	26.21	-
300	18.25	36.49	26.37	-
400	17.03	36.36	26.57	-
500	14.72	35.95	26.78	-
600	12.53	35.60	26.97	-
800	8.53	35.12	27.31	-

STATION Standard 3

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.8	0.2	0.0	-	0.4
10	0.7	0.7	0.5	-	0.2
20	0.5	0.2	0.0	-	-
50	0.6	0.6	0.0	-	0.7
99	0.7	0.6	0.0	0.0	0.8
149	1.3	<0.1	0.5	-	0.3
199	1.0	0.2	0.0	0.4	0.3
299	1.1	0.3	2.5	-	0.2
399	1.1	0.6	5.0	0.1	0.5
598	2.2	1.1	30.0	-	0.0
789	2.3	2.2	26.0	-	0.2
998	1.9	1.3	16.5	0.2	0.8

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.8	0.2	0.0	-	0.4
10	0.7	0.7	0.5	-	0.2
20	0.5	0.2	0.0	-	0.3
30	0.5	0.3	0.0	-	0.4
50	0.6	0.6	0.0	-	0.7
75	0.7	0.6	0.0	-	0.8
100	0.7	0.6	0.0	0.0	0.8
150	1.3	<0.1	0.5	0.2	0.3
200	1.0	0.2	0.0	0.4	0.3
250	1.1	0.3	1.5	0.3	0.3
300	1.1	0.3	2.5	0.2	0.2
400	1.1	0.6	5.0	0.1	0.5
500	1.7	0.9	17.5	-	0.3
600	2.2	1.1	30.0	-	0.0
700	2.3	1.7	28.0	-	0.1
800	2.3	2.2	26.0	-	0.2
1000	1.9	1.3	16.5	0.2	0.8

STATION Standard 4

DATE Jan. 24, 1954 LAT. 26°20' N. LONG. 76°44' W. TIME 04
DEPTH 4480 WIND 6 , 36 BAR. 21 AIR TEMP: dry 21.1 °C, wet 18.3 °C
HUMIDITY 77% WEATHER 01 CLOUDS: type 8 , amt. 1 SEA: dir. 34 , amt. 2
SWELL: dir. 35 , amt. 2 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	24.25	36.55	24.76	-
10	24.29	36.51	24.72	-
20	24.30	36.54	24.74	-
50	24.03	36.54	24.82	-
99	23.34	36.53	25.01	-
149	22.10	36.67	25.48	4.40*
199	20.37	36.65	25.94	3.69*
299	18.27	36.50	26.37	3.69*
398	17.05	36.27	26.49	3.88*
598	12.66	35.63	26.97	2.84*
798	8.45	35.10	27.30	3.00*
998	5.83	34.99	27.59	3.68*

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	24.25	36.55	24.76	-
10	24.29	36.51	24.72	-
20	24.30	36.54	24.74	-
30	24.22	36.54	24.76	-
50	24.03	36.54	24.82	-
75	23.74	36.53	24.90	-
100	23.32	36.53	25.02	-
150	22.06	36.67	25.49	-
200	20.34	36.65	25.95	-
250	19.19	36.58	26.20	-
300	18.26	36.50	26.37	-
400	17.01	36.26	26.50	-
500	14.79	35.93	26.75	-
600	12.61	35.62	26.97	-
800	8.42	35.10	27.31	-

STATION Standard 5

DATE Jan. 24, 1954 LAT. 26°21'N. LONG. 76°45'W. TIME 07
DEPTH 4389 WIND 7 , 01 BAR. 21 AIR TEMP: dry 20.6 °C, wet 17.8 °C
HUMIDITY 77% WEATHER 01 CLOUDS: type 6 , amt. 3 SEA: dir. 36 , amt. 2
SWELL: dir. 35 , amt. 2 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	23.99	36.55	24.84	4.83
10	24.01	36.50	24.79	4.83
20	24.04	36.52	24.80	4.81
50	23.98	36.47	24.78	4.83
100	22.59	36.40	25.13	4.93
150	21.95	36.44	25.34	4.82
200	20.90	36.73	25.86	4.50
300	18.30	36.55	26.40	4.55
400	16.90	36.31	26.56	4.23
600	13.04	35.70	26.94	3.66
800	8.68	35.16	27.31	3.54
1000	5.82	35.03	27.62	4.81

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	23.99	36.55	24.84	4.83
10	24.01	36.50	24.79	4.83
20	24.04	36.52	24.80	4.81
30	24.02	36.50	24.79	4.82
50	23.98	36.47	24.78	4.83
75	23.19	36.42	24.97	4.88
100	22.59	36.40	25.13	4.93
150	21.95	36.44	25.34	4.82
200	20.90	36.73	25.86	4.50
250	19.45	36.65	26.18	4.52
300	18.30	36.55	26.40	4.55
400	16.90	36.31	26.56	4.23
500	15.03	36.00	26.75	3.90
600	13.04	35.70	26.94	3.66
800	8.68	35.16	27.31	3.54
1000	5.82	35.03	27.62	4.81

STATION Standard 5

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.6	<0.1	0.0	1.7	0.3
10	1.0	0.3	0.5	2.3	2.5
20	0.7	0.2	0.0	-	1.0
50	0.8	0.4	0.0	-	0.2
100	0.6	<0.1	<0.5	-	-
150	-	0.6	1.0	-	0.6
200	0.9	0.7	0.0	-	1.2
300	0.9	0.8	2.5	-	1.7
400	2.3	0.5	5.5	-	1.4
600	1.6	1.2	21.0	-	1.2
800	3.3	1.5	10.5	-	1.5
1000	2.5	1.7	10.5	0.9	-

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.6	<0.1	0.0	1.7	0.3
10	1.0	0.3	0.5	2.3	2.5
20	0.7	0.2	0.0	-	1.0
30	0.7	0.3	0.0	-	0.7
50	0.8	0.4	0.0	-	0.2
75	0.7	0.2	<0.5	-	0.3
100	0.6	<0.1	<0.5	-	0.4
150	0.8	0.6	1.0	-	0.6
200	0.9	0.7	0.0	-	1.2
250	0.9	0.8	1.5	-	1.4
300	0.9	0.8	2.5	-	1.7
400	2.3	0.5	5.5	-	1.4
500	1.9	0.9	13.0	-	1.3
600	1.6	1.2	21.0	-	1.2
700	2.5	1.4	16.0	-	1.4
800	3.3	1.5	10.5	-	1.5
1000	2.5	1.7	10.5	0.9	-

STATION Standard 6

DATE Jan. 24, 1954 LAT. 26°21'N. LONG. 76°44'W. TIME 10
DEPTH 4480 WIND 6 , 04 BAR. 21 AIR TEMP: dry 20.6 °C, wet 17.2 °C
HUMIDITY 72 % WEATHER 01 CLOUDS: type 6 , amt. 2 SEA: dir. 03 , amt. 2
SWELL: dir. 35 , amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	23.99	36.61	24.88	4.81
10	23.97	36.56	24.85	4.81
20	24.02	36.54	24.82	4.82
50	23.91	36.56	24.87	4.85
100	22.57	36.46	25.18	5.00
150	21.94	36.45	25.35	4.91
200	20.78	36.71	25.87	4.56
300	18.33	36.51	26.36	4.48
400	16.83	36.30	26.57	4.24
600	13.01	35.68	26.94	3.68
700	10.55	35.35	27.15	3.43
1000	5.76	35.00	27.60	4.89

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	23.99	36.61	24.88	4.81
10	23.97	36.56	24.85	4.81
20	24.02	36.54	24.82	4.82
30	23.98	36.55	24.84	4.83
50	23.91	36.56	24.87	4.85
75	23.15	36.50	25.05	4.92
100	22.57	36.46	25.18	5.00
150	21.94	36.45	25.35	4.91
200	20.78	36.71	25.87	4.56
250	19.44	36.61	26.15	4.52
300	18.33	36.51	26.36	4.48
400	16.83	36.30	26.57	4.24
500	15.10	36.00	26.74	3.96
600	13.01	35.68	26.94	3.68
800	8.52	35.13	27.32	3.58
1000	5.76	35.00	27.60	4.89

STATION Standard 7

DATE Jan. 24, 1954 LAT. 26°25'N. LONG. 76°49'W. TIME 14
DEPTH 4206 WIND 8 , 02 BAR. 23 AIR TEMP: dry 21.7 °C, wet 18.3 °C
HUMIDITY 73% WEATHER 01 CLOUDS: type 8 , amt. 1 SEA: dir. 04 , amt. 2
SWELL: dir. 02 , amt. 2 VIS. 8 WATER TRANS. 28

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	23.90	36.55	24.86	-
10	23.90	36.55	24.86	-
20	23.93	36.54	24.85	4.48*
50	22.97	36.44	25.05	4.67*
100	22.52	36.44	25.18	-
150	21.86	36.44	25.37	4.65*
200	21.10	36.68	25.76	-
300	18.65	36.56	26.32	3.07*
400	16.23	36.22	26.65	3.68*
600	12.86	35.66	26.95	-
800	8.47	35.14	27.33	2.82*
1000	5.77	35.02	27.62	-

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	23.90	36.55	24.86	-
10	23.90	36.55	24.86	-
20	23.93	36.54	24.85	-
30	23.55	36.50	24.93	-
50	22.97	36.44	25.05	-
75	22.77	36.44	25.11	-
100	22.52	36.44	25.18	-
150	21.86	36.44	25.37	-
200	21.10	36.68	25.76	-
250	19.87	36.65	26.07	-
300	18.65	36.56	26.32	-
400	16.23	36.22	26.65	-
500	14.67	35.94	26.79	-
600	12.86	35.66	26.95	-
800	8.47	35.14	27.33	-
1000	5.77	35.02	27.62	-

STATION Standard 7

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.8	0.2	2.0	0.5	0.7
10	1.4	0.1	0.0	-	0.2
20	1.1	<0.1	0.0	-	1.8
50	1.5	<0.1	0.5	-	0.5
100	1.1	0.0	0.5	1.1	1.1
150	2.7	0.0	0.0	-	0.6
200	1.2	<0.1	0.0	3.8	1.2
300	1.3	0.1	0.0	0.5	1.1
400	1.5	0.4	2.0	0.0	0.9
600	2.5	1.0	10.0	-	1.1
800	2.9	1.6	27.0	0.7	1.3
1000	3.2	1.5	30.0	0.0	1.0

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.8	0.2	2.0	0.5	0.7
10	1.4	0.1	0.0	-	0.2
20	1.1	<0.1	0.0	-	1.8
30	1.2	<0.1	<0.5	-	1.4
50	1.5	<0.1	0.5	-	0.5
75	1.3	<0.1	0.5	-	0.8
100	1.1	0.0	0.5	1.1	1.1
150	2.7	0.0	0.0	2.5	0.6
200	1.2	<0.1	0.0	3.8	1.2
250	1.3	0.1	0.0	2.2	1.2
300	1.3	0.1	0.0	0.5	1.1
400	1.5	0.4	2.0	0.0	0.9
500	2.0	0.7	6.0	-	1.0
600	2.5	1.0	10.0	-	1.1
700	2.7	1.3	18.5	-	1.2
800	2.9	1.6	27.0	0.7	1.3
1000	3.2	1.5	30.0	0.0	1.0

STATION Standard 8

DATE Jan. 24, 1954 LAT. 26°24'N. LONG. 76°48'W. TIME 17
DEPTH 4206 WIND 6 ,03 BAR. 24 AIR TEMP: dry 22.2 °C, wet 18.9 °C
HUMIDITY 73 % WEATHER 03 CLOUDS: type 6 ,amt. 4 SEA: dir. 03 ,amt. 2
SWELL: dir. 02 ,amt. 2 VIS. 8 WATER TRANS. 27

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	23.94	36.55	24.85	3.92*
10	23.94	36.56	24.86	-
20	23.96	36.53	24.83	3.80*
50	23.03	36.42	25.02	4.06*
100	22.52	36.43	25.18	4.06*
150	22.04	36.44	25.32	-
200	21.30	36.67	25.70	3.77*
300	18.67	36.55	26.31	-
400	16.48	36.24	26.61	3.14*
600	12.73	35.65	26.97	2.53*
800	8.47	35.14	27.33	2.05*
1000	5.68	35.03	27.64	2.91*

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	23.94	36.55	24.85	-
10	23.94	36.56	24.86	-
20	23.96	36.53	24.83	-
30	23.60	36.48	24.90	-
50	23.03	36.42	25.02	-
75	22.77	36.43	25.10	-
100	22.52	36.43	25.18	-
150	22.04	36.44	25.32	-
200	21.30	36.67	25.70	-
250	19.93	36.63	26.04	-
300	18.67	36.55	26.31	-
400	16.48	36.24	26.61	-
500	14.67	35.94	26.79	-
600	12.73	35.65	26.97	-
800	8.47	35.14	27.33	-
1000	5.68	35.03	27.64	-

STATION Standard 9

DATE Jan. 24, 1954 LAT. 26°20'N. LONG. 76°43'W. TIME 20
DEPTH 4535 WIND 2 , 05 BAR. 22 AIR TEMP: dry 22.2°C, wet 18.9°C
HUMIDITY 73% WEATHER 03 CLOUDS: type 6 , amt. 6 SEA: dir. 05 , amt. 1
SWELL: dir. 02 , amt. 5 VIS. 8 WATER TRANS. 24

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	24.22	36.54	24.76	4.17*
10	24.26	36.53	24.74	3.71*
20	24.25	36.51	24.73	4.67*
50	24.10	36.56	24.81	4.57*
99	23.76	36.53	24.89	3.89*
149	22.04	36.49	25.36	3.39*
198	20.48	36.66	25.92	3.53*
298	18.38	36.49	26.33	3.67*
397	17.46	36.38	26.48	3.49*
596	13.11	35.68	26.92	2.97*
896	6.82	35.07	27.52	3.26*
996	5.79	34.99	27.59	3.70*

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	24.22	36.54	24.76	-
10	24.26	36.53	24.74	-
20	24.25	36.51	24.73	-
30	24.20	36.53	24.76	-
50	24.10	36.56	24.81	-
75	24.03	36.55	24.83	-
100	23.72	36.53	24.90	-
150	22.00	36.50	25.38	-
200	20.43	36.66	25.93	-
250	19.24	36.59	26.19	-
300	18.37	36.49	26.34	-
400	17.39	36.37	26.49	-
500	15.19	35.99	26.71	-
600	12.99	35.67	26.93	-
800	8.31	35.20	27.40	-

STATION Standard 10

DATE Jan. 24, 1954 LAT. 26°20'N. LONG. 76°43'W. TIME 23
DEPTH 4389 WIND 6 , 05 BAR. 23 AIR TEMP: dry 22.2°C, wet 18.9°C
HUMIDITY 73% WEATHER 03 CLOUDS: type 6 , amt. 3 SEA: dir. 05 , amt. 1
SWELL: dir. 02 , amt. 5 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	24.26	36.62	24.81	4.76
10	24.31	36.55	24.74	4.76
20	24.30	36.55	24.74	4.80
49	24.08	36.54	24.80	4.83
99	23.85	36.53	24.86	4.85
148	22.36	36.69	25.42	4.77
197	20.68	36.71	25.90	4.53
296	18.54	36.55	26.34	4.53
395	17.36	36.36	26.49	4.28
594	13.16	35.73	26.94	3.60
792	8.57	35.15	27.32	3.48
991	5.72	35.01	27.62	4.85

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	24.26	36.62	24.81	4.76
10	24.31	36.55	24.74	4.76
20	24.30	36.55	24.74	4.80
30	24.22	36.55	24.77	4.81
50	24.08	36.54	24.80	4.84
75	23.96	36.53	24.83	4.85
100	23.82	36.53	24.87	4.84
150	22.28	36.69	25.44	4.76
200	20.60	36.71	25.92	4.53
250	19.41	36.63	26.18	4.53
300	18.50	36.54	26.34	4.52
400	17.26	36.34	26.50	4.26
500	15.20	36.02	26.73	3.92
600	13.00	35.71	26.96	3.58
800	8.42	35.14	27.34	3.49

STATION Standard 11

DATE Jan. 25, 1954 LAT. 26°20'N. LONG. 76°43'W. TIME 02
DEPTH 4389 WIND 4 , 03 BAR. 24 AIR TEMP: dry 22.2°C, wet 18.3°C
HUMIDITY 69% WEATHER 02 CLOUDS: type - , amt. 2 SEA: dir. 04 , amt. 1
SWELL: dir. 02 , amt. 5 VIS. - WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	24.30	36.53	24.73	4.84
10	24.32	36.53	24.72	4.76
20	24.37	36.51	24.69	4.76
50	24.02	36.51	24.80	4.81
99	23.81	36.52	24.87	4.81
149	22.44	36.69	25.40	4.67
198	20.59	36.70	25.92	4.44
297	18.42	36.52*	26.35	4.49
396	17.33	36.49	26.59	4.27
595	13.01	35.78	27.01	3.58
795	8.59	35.23	27.38	3.48
994	5.79	35.10	27.68	4.79

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	24.30	36.53	24.73	4.84
10	24.32	36.53	24.72	4.76
20	24.37	36.51	24.69	4.76
30	24.23	36.51	24.74	4.78
50	24.02	36.51	24.80	4.81
75	23.91	36.52	24.84	4.81
100	23.79	36.52	24.87	4.80
150	22.40	36.69	25.41	4.66
200	20.54	36.70	25.93	4.43
250	19.32	36.69	26.25	4.46
300	18.40	36.65	26.45	4.48
400	17.24	36.47	26.60	4.26
500	15.08	36.10	26.82	3.88
600	12.88	35.76	27.02	3.57
800	8.50	35.22	27.39	3.50

STATION Standard 12

DATE Jan. 25, 1954 LAT. 26°20'N. LONG. 76°42'W. TIME 05
DEPTH 4938 WIND 6 , 04 BAR. 23 AIR TEMP: dry 22.8°C, wet 18.9°C
HUMIDITY 70% WEATHER 02 CLOUDS: type - , amt. 2 SEA: dir. 04 , amt. 1
SWELL: dir. 02 , amt. 5 VIS. - WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	24.12	36.58	24.82	3.77*
8	24.15	36.60	24.83	3.65*
17	24.10	36.62	24.86	-
43	23.97	36.60	24.88	4.10*
87	23.98	36.60	24.88	4.18*
132	22.52	36.75	25.42	4.21*
177	20.92	36.81	25.91	3.08*
267	18.49	36.62	26.41	3.03*
357	17.79	36.50	26.49	-
539	14.09	35.95	26.92	3.36*
722	10.03	35.35	27.24	1.99*
913	6.85	35.08	27.52	3.48*

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	24.12	36.58	24.82	-
10	24.14	36.61	24.84	-
20	24.08	36.62	24.86	-
30	24.02	36.61	24.87	-
50	23.97	36.60	24.88	-
75	23.98	36.60	24.88	-
100	23.57	36.65	25.04	-
150	21.85	36.79	25.64	-
200	20.13	36.79	26.11	-
250	18.75	36.66	26.37	-
300	18.32	36.59	26.43	-
400	16.95	36.37	26.59	-
500	14.91	36.07	26.83	-
600	12.63	35.71	27.03	-
800	8.60	35.20	27.36	-

STATION Standard 13

DATE Jan. 25, 1954 LAT. 26°20'N. LONG. 76°44'W. TIME 08
DEPTH 4535 WIND 8 , 04 BAR. 23 AIR TEMP: dry 22.2 °C, wet 18.3 °C
HUMIDITY 69% WEATHER 02 CLOUDS: type 8 , amt. 3 SEA: dir. 04 , amt. 1
SWELL: dir. 02 , amt. 5 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	23.96	36.64	24.91	3.48*
9	23.96	36.64	24.91	4.18*
17	24.00	36.64	24.90	4.31*
44	23.95	36.62	24.90	3.39*
88	23.93	36.60	24.89	3.47*
132	22.34	36.77	25.48	3.92*
177	21.35	36.81	25.79	3.48*
267	19.11	36.68	26.29	3.36*
358	17.62	36.46	26.50	3.03*
542	13.88	35.90	26.93	2.98*
726	10.07	35.36	27.24	2.87*
911	6.62	35.12	27.59	2.87*

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	23.96	36.64	24.91	-
10	23.97	36.64	24.91	-
20	23.99	36.64	24.91	-
30	23.97	36.63	24.90	-
50	23.95	36.61	24.89	-
75	23.94	36.61	24.90	-
100	23.44	36.66	25.08	-
150	21.95	36.79	25.61	-
200	20.71	36.79	25.95	-
250	19.47	36.71	26.22	-
300	18.60	36.60	26.36	-
400	16.77	36.33	26.61	-
500	14.74	36.03	26.84	-
600	12.64	35.70	27.03	-
800	8.64	35.23	27.38	-

STATION Standard 14

DATE Jan. 25, 1954 LAT. 26°18'N. LONG. 76°44'W. TIME 11
DEPTH 4352 WIND 10 , 02 BAR. 24 AIR TEMP: dry 21.7°C, wet 18.3°C
HUMIDITY 73% WEATHER 02 CLOUDS: type 8 , amt. 4 SEA: dir. 04 , amt. 2
SWELL: dir. 02 , amt. 5 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	23.98	36.62	24.89	3.94*
9	24.02	36.62	24.88	2.85*
17	24.05	36.62	24.87	2.65*
42	23.99	36.57	24.85	3.85*
84	23.96	36.60	24.88	-
126	22.94	36.77	25.31	-
168	21.87	36.78	25.63	3.51*
253	19.32	36.71	26.26	3.51*
340	17.95	36.55	26.49	3.61*
513	14.88	36.08	26.85	2.87*
688	10.90	35.46	27.17	2.79*
863	7.24	35.12	27.50	2.79*

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	23.98	36.62	24.89	-
10	24.03	36.62	24.88	-
20	24.04	36.61	24.87	-
30	24.01	36.59	24.86	-
50	23.98	36.58	24.86	-
75	23.97	36.58	24.87	-
100	23.58	36.68	25.06	-
150	22.34	36.78	25.49	-
200	20.77	36.76	25.91	-
250	19.39	36.71	26.24	-
300	18.59	36.63	26.39	-
400	16.98	36.40	26.61	-
500	15.14	36.12	26.82	-
600	12.86	35.74	27.01	-
800	8.52	35.21	27.38	-

STATION Special 5

DATE Jan. 21, 1954 LAT. 29°58'N. LONG. 77°00'W. TIME 24
DEPTH 942 WIND 5 , 18 BAR. 23 AIR TEMP: dry 23.3°C, wet 21.7°C
HUMIDITY 87 % WEATHER 02 CLOUDS: type - , amt. 1 SEA: dir. 18 , amt. 2
SWELL: dir. - , amt. - VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	24.22	36.22	24.52	4.71
5	24.17	36.24	24.55	4.80
10	24.19	36.20	24.51	4.88
28	24.11	36.24	24.57	5.09
59	22.89	36.39	25.04	5.00
88	21.88	36.38	25.32	4.90
120	21.49	36.60	25.59	4.47
182	-	36.58	-	4.69
245	19.18	36.57	26.19	3.59
374	18.19	36.49	26.38	4.52
504	17.36	36.33	26.46	4.23
570	-	36.07	-	3.79

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	24.22	36.22	24.52	4.71
10	24.19	36.20	24.51	4.88
20	24.14	36.22	24.54	5.02
30	24.09	36.25	24.58	5.08
50	23.21	36.36	24.92	5.03
75	22.12	36.38	25.25	4.98
100	21.72	36.48	25.44	4.70
150	20.98	36.60	25.74	4.55
200	20.07	36.58	25.97	4.27
250	19.06	36.57	26.22	3.65
300	18.67	36.54	26.30	4.13
400	18.00	36.46	26.41	4.48
500	17.45	36.34	26.45	4.25

STATION Special 5

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	0.9	0.2	0.0	0.1	-
5	1.1	0.2	0.0	1.5	0.8
10	1.1	0.2	<0.5	-	0.7
28	0.7	0.3	0.0	0.1	0.5
59	1.2	0.3	0.0	-	0.2
88	1.8	0.1	0.0	-	0.0
120	1.2	0.2	1.0	1.7	0.6
182	0.7	0.0	0.5	3.1	1.0
245	1.4	0.5	1.5	0.0	1.4
374	1.6	0.6	3.0	-	0.1
504	1.5	0.4	3.0	-	0.7
570	1.5	1.1	12.5	2.2	0.8

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	0.9	0.2	0.0	0.1	-
10	1.1	0.2	<0.5	1.2	0.7
20	0.9	0.2	0.0	0.6	0.6
30	0.7	0.3	0.0	0.1	0.5
50	1.1	0.3	0.0	0.5	0.3
75	1.5	0.2	0.0	0.9	0.1
100	1.6	0.1	0.5	1.3	0.2
150	0.9	0.1	1.0	2.4	0.8
200	0.9	0.1	1.0	2.2	1.1
250	1.4	0.5	1.5	0.0	1.4
300	1.5	0.5	2.0	0.5	0.9
400	1.6	0.5	3.0	1.4	0.2
500	1.5	0.4	3.0	2.2	0.7

STATION Special 6

DATE Jan. 22, 1954 LAT. 29°00'N. LONG. 77°00'W. TIME 10
DEPTH 1088 WIND 4 , 18 BAR. 21 AIR TEMP: dry 22.8°C, wet 20.0°C
HUMIDITY 78% WEATHER 02 CLOUDS: type 8, amt. 1 SEA: dir. 18 , amt. 2
SWELL: dir. 09 , amt. 1 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	23.43	36.38	24.87	4.65
10	23.49	36.36	24.84	4.38
19	23.36	36.38	24.89	4.22
48	23.31	36.44	24.95	4.42
97	22.94	36.40	25.03	4.48
195	19.62	36.60	26.10	4.07
293	18.32	36.49	26.35	4.15
392	17.62	36.36	26.42	3.78
590	14.54	35.88	26.77	3.78
788	9.89	35.26	27.19	3.47
987	4.32	36.40*	28.89	5.02

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	23.43	36.38	24.87	4.65
10	23.49	36.36	24.84	4.38
20	23.36	36.38	24.89	4.23
30	23.36	36.41	24.92	4.31
50	23.31	36.44	24.95	4.43
75	23.19	36.41	24.97	4.47
100	22.81	36.40	25.07	4.46
150	21.50	36.47	25.49	4.25
200	19.50	36.59	26.12	4.08
250	18.70	36.55	26.30	4.13
300	18.29	36.48	26.35	4.12
400	17.53	36.35	26.44	3.78
500	16.38	36.13	26.55	3.78
600	14.40	35.85	26.78	3.77
800	9.53	-	-	3.51

STATION Special 6

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.0	0.3	0.0	2.5	0.8
10	1.3	0.6	0.0	-	0.6
19	1.1	0.5	0.5	0.3	-
48	1.5	0.3	1.0	-	0.8
97	0.6	0.2	0.0	1.1	0.1
195	1.1	0.6	1.0	-	0.1
293	1.0	0.2	3.5	0.0	1.0
392	1.0	0.5	4.0	2.3	0.4
590	2.0	0.8	13.0	0.0	1.5
788	2.9	2.0	24.0	-	6.4
987	1.4	1.4	15.0	-	0.4

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.0	0.3	0.0	2.5	0.8
10	1.3	0.6	0.0	1.4	0.6
20	1.1	0.5	0.5	0.3	0.7
30	1.2	0.4	0.5	0.4	0.7
50	1.5	0.3	1.0	0.6	0.8
75	1.1	0.3	0.5	0.9	0.5
100	0.6	0.2	0.0	1.1	0.1
150	0.9	0.4	0.5	-	0.1
200	1.1	0.6	1.0	-	0.1
250	1.1	0.4	2.5	-	0.6
300	1.0	0.2	3.5	0.0	1.0
400	1.0	0.5	4.0	2.3	0.4
500	1.5	0.7	8.5	1.2	1.0
600	2.0	0.8	13.0	0.0	1.5
700	2.5	1.4	18.5	-	-
800	2.9	2.0	24.0	-	6.4
1000	1.4	1.4	15.0	-	0.4

STATION Special 7

DATE Jan. 22, 1954 LAT. 28°00'N. LONG. 77°00'W. TIME 20
DEPTH 1061 WIND 5 , 17 BAR. 18 AIR TEMP: dry 23.9 °C, wet 22.2 °C
HUMIDITY 87% WEATHER 01 CLOUDS: type 8 , amt. 2 SEA: dir. 18 , amt. 3
SWELL: dir. 11 , amt. 2 VIS. 8 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	23.77	36.36	24.76	4.93
7	23.71	36.35	24.77	4.76
15	23.63	36.36	24.80	4.77
40	23.31	36.40	24.92	4.76
82	23.00	36.40	25.01	4.66
124	22.58	36.49	25.20	4.54
167	21.17	36.61	25.69	4.45
255	19.28	36.51	26.12	4.80
345	18.32	36.45	26.32	4.78
534	16.85	36.26	26.53	4.23
730	13.74	35.82	26.89	5.29
929	12.19	35.59	27.03	5.15

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	23.77	36.36	24.76	4.93
10	23.68	36.35	24.78	4.76
20	23.57	36.37	24.83	4.77
30	23.46	36.38	24.87	4.77
50	23.25	36.40	24.94	4.74
75	23.06	36.40	25.00	4.68
100	22.85	36.41	25.07	4.60
150	22.03	36.60	25.44	4.47
200	20.23	36.59	25.93	4.50
250	19.40	36.52	26.10	4.79
300	18.78	36.48	26.23	4.79
400	17.85	36.42	26.41	4.46
500	17.17	36.31	26.50	4.28
600	15.85	36.12	26.66	4.50
800	13.01	35.71	26.96	5.27

STATION Special 7

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.1	0.6	0.5	-	0.2
7	1.1	0.6	0.0	-	-
15	0.8	0.4	0.0	-	0.3
40	0.9	-	0.0	-	1.5
82	1.0	0.6	0.0	0.5	0.9
124	1.2	0.0	0.0	-	0.0
167	1.2	0.3	1.0	0.8	-
255	1.0	0.2	1.0	-	<0.1
345	1.2	0.7	1.0	1.5	1.4
534	1.6	0.7	0.0	-	0.2
730	1.4	0.4	8.0	-	0.5
929	1.8	1.3	9.0	-	0.9

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.1	0.6	0.5	-	0.2
10	1.0	0.5	0.0	-	0.3
20	0.8	0.4	0.0	-	0.6
30	0.9	0.5	0.0	-	1.1
50	0.9	0.5	0.0	-	1.3
75	1.0	0.6	0.0	0.5	1.0
100	1.1	0.4	0.0	0.7	0.5
150	1.2	0.2	0.5	0.8	0.0
200	1.1	0.3	1.0	1.0	0.0
250	1.0	0.2	1.0	1.3	<0.1
300	1.1	0.5	1.0	1.5	0.7
400	1.3	0.7	0.5	-	1.1
500	1.5	0.7	<0.5	-	0.4
600	1.6	0.6	2.5	-	0.3
700	1.5	0.4	7.0	-	0.5
800	1.5	0.7	8.5	-	0.7

STATION Special 9

DATE Feb. 1, 1954 LAT. 28°00'N. LONG. 79°00'W. TIME 07
DEPTH 832 WIND 6 , 04 BAR. 22 AIR TEMP: dry 20.0 °C, wet 16.7 °C
HUMIDITY 72 % WEATHER 00 CLOUDS: type - , amt. - SEA: dir. 04 , amt. 2
SWELL: dir. 36 , amt. 1 VIS. 7 WATER TRANS. -

OBSERVED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
1	24.41	35.46*	23.89	4.72
9	24.35	36.40	24.62	4.18
18	24.36	36.40	24.61	4.06
40	24.01	36.47	24.77	4.00
81	23.11	36.55	25.10	4.26
168	21.90	36.60	25.48	4.51
254	19.19	36.64	26.24	3.93
340	18.42	36.56	26.38	3.69
429	17.74	36.49	26.49	3.58
606	13.54	35.80	26.92	3.21
697	9.88	35.30	27.23	3.23

* Value questionable

INTERPOLATED AND CALCULATED

DEPTH (m)	T (°C)	S (‰)	σ_t	O_2 (ml/l)
0	24.41	-	-	4.72
10	24.35	36.40	24.62	4.16
20	24.35	36.41	24.62	4.05
30	24.25	36.44	24.68	4.01
50	23.68	36.49	24.88	4.01
75	23.20	36.54	25.06	4.15
100	22.77	36.57	25.21	4.39
150	22.10	36.59	25.42	4.50
200	21.20	36.62	25.69	4.46
250	19.25	36.64	26.23	3.97
300	18.70	36.59	26.33	3.79
400	17.98	36.51	26.45	3.62
500	16.50	36.28	26.63	3.45
600	13.70	35.83	26.91	3.21

STATION Special 9

OBSERVED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
1	1.0	0.2	0.0	0.7	0.1
9	1.1	0.3	0.0	0.2	0.3
18	1.4	0.1	-	0.0	0.6
40	1.1	0.3	0.0	0.4	-
81	1.5	0.2	0.0	-	0.7
168	1.2	0.1	0.5	-	0.4
254	1.5	0.3	3.5	0.2	0.2
340	0.8	0.4	0.5*	0.3	0.4
429	0.5	0.7	0.0*	-	1.0
606	2.1	-	14.5	-	1.2
697	1.9	-	15.5	-	<0.1

* Value questionable

INTERPOLATED

DEPTH (m)	TOTAL P (µg at/l)	PO_4-P (µg at/l)	NO_3-NO_2 (µg at/l)	ARABINOSE (mg/l)	TYROSINE (mg/l)
0	1.0	0.2	0.0	0.7	0.1
10	1.1	0.3	0.0	0.2	0.3
20	1.4	0.1	0.0	0.0	0.6
30	1.3	0.2	0.0	0.2	0.6
50	1.2	0.3	0.0	0.4	0.7
75	1.4	0.3	0.0	0.4	0.7
100	1.4	0.2	<0.5	0.3	0.6
150	1.3	0.1	<0.5	0.3	0.5
200	1.3	0.2	1.5	0.3	0.3
250	1.5	0.3	3.5	0.2	0.2
300	1.1	0.4	5.0	0.3	0.3
400	0.6	0.6	8.0	-	0.8
500	1.4	-	11.0	-	1.1
600	2.1	-	14.5	-	1.2
700	1.9	-	15.5	-	<0.1

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